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Beaufort County

LAND USE PLAN

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1976

N.C. COASTAL RESOURCES COMMISSION

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May 1976

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I. INTRODUCTION

This document, The Beaufort County Coastal Area Management Act Land Use Plan, is the result of almost two years of intensive effort on the part of many people in Beaufort County. The plan was initiated in response to the North Carolina Coastal Area Management Act passed by the 1974 General Assembly.

The Coastal Area Management Act (CAMA) established a cooperative program of land use management between local and state governments. The goals of the act were:

1) To provide a management system capable of preserving and managing the environmentally sensitive areas;
2) To ensure that development in the coastal area proceeds in an orderly manner; and
3) To provide a balance between the use and preservation of our coastal resources.

Under the Act local governments are responsible for developing local land use plans which reflect the public's desires concerning local growth and development. The Coastal Resources Commission (CRC) was established by the Act to oversee the development of local land use plans. The CRC was also given the responsibility of designating Areas of Environmental Concern (AEC), which are to receive special attention from both the local governments and the CRC.

This document represents Beaufort County's efforts to comply with the requirements of the Act. It is written in accordance with the "State Guidelines For Local Planning In The Coastal Area Under The Coastal Area Management Act of 1974." These guidelines were prepared by the CRC and adopted on January 27, 1975; amended October 15, 1975.

The planning process that resulted in this plan was a trying experience for local government officials, planning board members and the public. Issues were raised which many people did not wish to face. Emotion often overruled reason with the result of more heat than light being created by the debate. In the end, the county established goals for its future development. There exists no concensus of these goals in Beaufort County; but, hopefully, they and the resulting plan represent a reasonable course with which the majority of the citizens concur.

II. DESCRIPTION OF PRESENT CONDITIONS

A. POPULATION AND ECONOMY

1. Population

Beaufort County has experienced a population loss during the past two decades. There was a decrease of 1,120 people between 1950 and 1960 and a small decrease of 34 people between 1960 and 1970. This large loss of population between 1950 and 1960 can probably be attributed, in part, to the national trend of population migration from the rural areas to urban areas, coupled with a change in agricultural practices which reduced labor demand.

Most rural areas, especially in Eastern North Carolina, continued to experience population loss during the 1960's. Beaufort County's minor loss of population can be attributed to the opening of the phosphate mining industry, plus location of a number of other industries in the county. These job opportunities countered the loss of jobs in other sectors of the economy and held population loss at a minimum.

While the county managed to minimize population loss during the 1960's, it continued to lose black population. Between 1960 and 1970, the county lost a total of 1,355 blacks, or 10.11 percent. Every township except Long Acre lost blacks (Table 2). In one township, Pantego, blacks accounted for 83.7 percent of the township's population loss.

The major population movement during the 1960's was within the county. Of the six townships in the county, three lost population, headed by Washington Township and followed by Pantego and Bath. The remaining three gained population. Richland Township had an increase of 31.2 percent.

Of the incorporated areas in the county, only Aurora had a population increase (Table 4). Aurora's population increase accounted for 104.2 percent of Richland Township's population increase.

The above indicates a pattern of population loss in most areas of the county, with Long Acre Township, which serves as a residential area for Washington, and Aurora increasing in population.

TABLE 1 POPULATION CHANGES

BEAUFORT COUNTY

1920 - 1970

YEAR	BEAUFORT COUNTY	CHANGE IN NUMBERS
1920	31,024	--
1930	35,026	4,002
1940	36,431	1,405
1950	37,134	703
1960	36,014	- 1,120
1970	35,908	- 34

SOURCE: U. S. Census of Population: General Population Characteristics, North Carolina, 1920 - 1970.

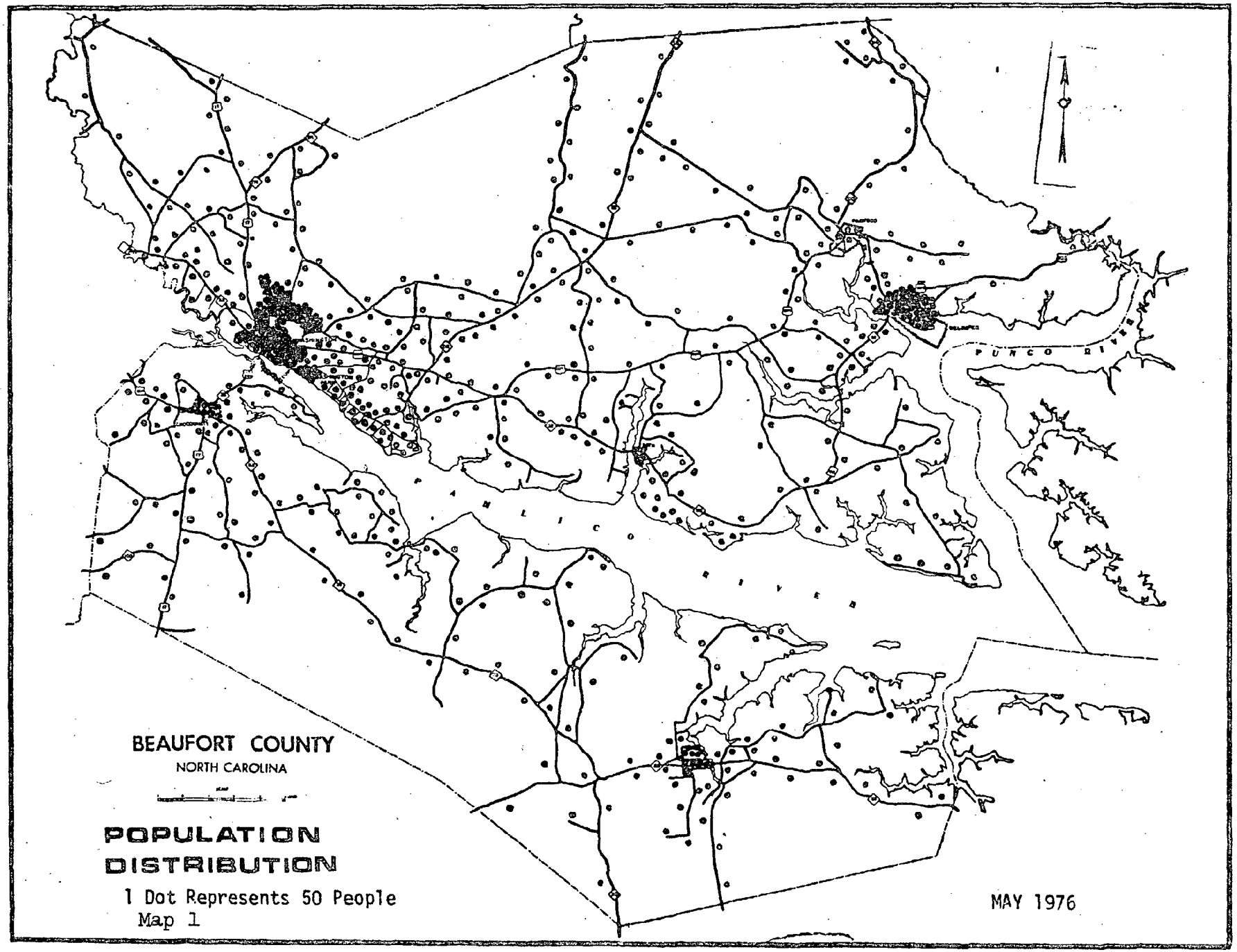

PUNCO RIVER
BEAUFORT COUNTY
NORTH CAROLINA
POPULATION
DISTRIBUTION
1 Dot Represents 50 People
Map 1
MAY 1976

TABLE 2 SUMMARY OF POPULATION TRENDS

Beaufort County and Townships

1960 and 1970

			Change: 1960 and 1970	
	1960	1970	Number	Percent
Beaufort County	36,014	35,980	- 34	- 0.1
Chocowinity Township	4,628	4,661	33	0.7
Long Acre Township	5,318	6,976	1,658	31.2
Bath Township	3,323	3,237	- 86	- 2.6
Richland Township	3,462	3,626	164	4.7
Pantego Township	5,377	5,126	- 251	- 4.7
Washington Township	13,906	12,354	-1,552	-11.2

SOURCE: U. S. Census of Population: Number of Inhabitants 1960 and 1970.

TABLE 3 BLACK POPULATION BY TOWNSHIPS

BEAUFORT COUNTY

1960 and 1970

TOWNSHIPS	1960	1970	NUMBER CHANGE	% CHANGE
County	13,290	11,935	-1,355	-10.11
Bath	940	813	- 127	-13.5
Chocowinity	1,540	1,366	- 174	-11.2
Long Acre	648	737	89	13.7
Pantego	2,730	1,753	- 210	- 7.6
Richland	1,822	1,753	- 69	- 3.7
Washington	5,610	4,746	- 864	-15.4

SOURCE: U. S. Census of Population, 1960 and 1970.

TABLE 4 POPULATION TRENDS

Selected Places

1960 and 1970

			Change: 1960 and 1970	
	1960	1970	Number	Percent
Aurora	449	620	171	38.1
Bath	346	231	-115	-33.2
Belhaven	2,386	2,259	-127	- 5.3
Chocowinity	580	566	- 22	- 2.4
Pantego	262	218	- 44	-16.8
Washington	9,939	8,961	-978	- 9.8
Washington Park	574	517	- 57	- 9.9

SOURCE: U.S. Census of Population: Number of Inhabitants, North Carolina 1960 and 1970.

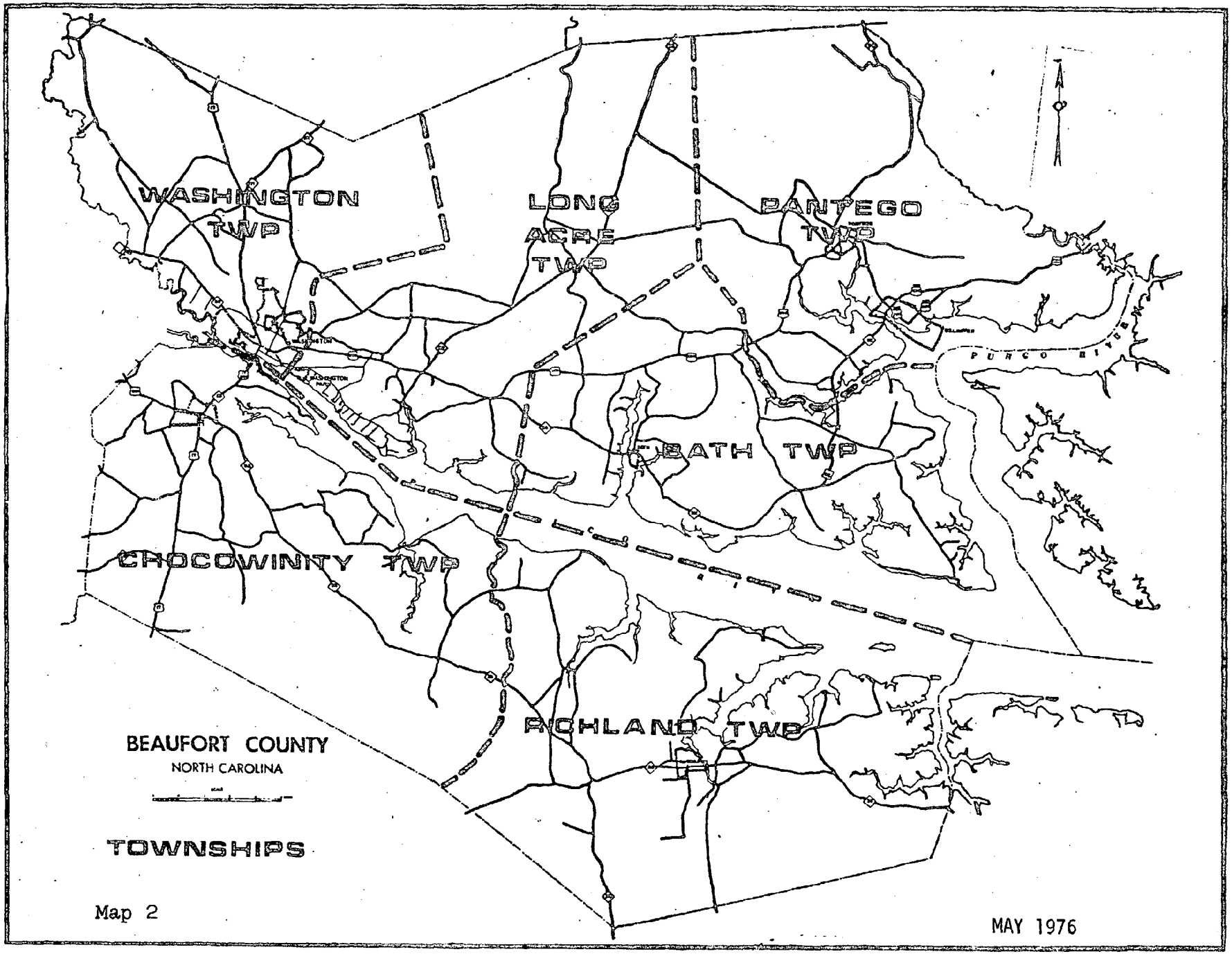

WASHINGTON TWP
LONG ACRE TWP
PANTEGO TWP
PUNGO RIVER
BATH TWP
CROCOWINITY TWP
RICHLAND TWP
BEAUFORT COUNTY
NORTH CAROLINA
TOWNSHIPS
Map 2
MAY 1976

Table 5 examines the median age of the population in Beaufort County and North Carolina for 1960 and 1970. The table indicates that Beaufort County's median age rose faster than that of the state. This reflects an increase in the ratio of older people to younger. Table 6 examines population change in the county by age group between 1960 and 1970.

TABLE 5 MEDIAN AGE

Beaufort County and North Carolina

1960-1970

	1960	1970
Beaufort County	26.2	29.0
North Carolina	25.5	26.5

The age groupings have important implications for the provisions of services by local government. The different age groups make different demands for services. An increase in population below five years of age, for instance, would indicate an increased demand on schools in the near future.

The educational attainment of the county's population increased between 1960 and 1970. Table 7 examines the number of years of school completed for the county. Notice the sharp decline in the number with no schooling, while those with some high school or college increased.

2. Economy

A definitive analysis of Beaufort County's economy is beyond the scope of this study. This section will attempt to provide an economic overview and framework of Beaufort County to be used by local decision makers.

TABLE 6 POPULATION CHANGE BY AGE GROUP

Beaufort County

1960 - 1970

	1960	1970	Number	Percent
Under 5 years	4,085	2,905	-1,180	-28.8
5 to 9	4,209	3,517	- 692	-16.4
10 to 14	4,305	3,867	- 438	-10.1
15 to 19	3,152	3,597	- 445	14.1
20 to 24	1,809	2,431	622	34.3
25 to 29	1,849	2,072	223	12.0
30 to 34	2,027	1,859	- 168	- 8.2
35 to 39	2,075	1,859	- 216	-10.4
40 to 44	2,181	2,038	- 143	- 6.5
45 to 49	2,340	2,013	- 327	-13.9
50 to 59	3,621	4,229	608	16.7
60 and over	4,361	5,593	1,232	28.2
TOTAL	36,014	35,980		

SOURCE: U. S. Census of Population Characteristics, 1960 - 1970.

TABLE 7 YEARS OF SCHOOL COMPLETED

Beaufort County

1960 and 1970

Total	1960	1970	Number Change	Percent Change
Male and Female, 25 yrs. and over	18,508	19,653	1,145	6.1
Number school years completed	733	367	- 366	-49.9
Elementary: 1 to 4 yrs.	3,065	2,279	- 786	-25.6
5 to 8 yrs.	7,128	5,863	-1,265	-17.7
High School: 1 to 3 yrs.	2,801	4,295	1,494	53.3
4 yrs.	3,050	4,448	1,398	45.8
College: 1 to 3 yrs.	1,003	1,236	233	23.2
4 or more	728	1,162	434	59.6

SOURCE: U. S. Census of Population, 1960 and 1970.

The past two decades have witnessed a profound change in the agricultural practices in the United States. Farming has become increasingly mechanized, creating a trend toward fewer, but larger, farms and fewer workers needed to produce equal or greater yields. This change in agricultural practice has had its impact upon Beaufort County.

In 1962, 31.8 percent of Beaufort County's total employed were engaged in agricultural employment. During the following decade, the county lost 1,550 agricultural jobs. As Table 8 shows, this loss in agricultural jobs was more than made up for in industrial jobs. During the same period the county gained 4,910 non-agricultural wage and salary jobs. These are largely accounted for

by the opening of Texas Gulf's operations in 1964 and the Hamilton Beach plant opening in 1966,with several other smaller concerns locating in the county during the period.

TABLE 8 WORK FORCE ESTIMATES

Beaufort County 1962, 1967 and 1972

	1962	1967	1972	Net Change (+or) 1962-72
Civilian Work Force	12,760	14,830	16,740	+3,980
Unemployment, Total	760	640	590	- 170
Rate of Unemployment	6.0	4.3	3.5	- 2.5
Employment, Total	12,000	14,190	16,150	+4,150
Non-Agricultural Wage & Salary Employment	6,440	9,180	11,350	+4,910
Manufacturing[1/]	2,010	3,260	4,310	+2,300
Non-Manufacturing[2/]	4,430	5,920	7,040	+2,610
All Other Non-Agricultural Employment	1,780	2,230	2,570	+ 790
Agricultural Employment	3,780	2,780	2,230	-1,550

[1/] Includes: Food; lumber and wood; tobacco; apparel; printing; stone, clay and glass; and non-electrical machinery.

[2/] Includes: Construction; transportation, communication and public utilities; trade; financial, insurance and real estate; service; government and other non-manufacturing.

Over the past decade Beaufort County has enjoyed a period of economic prosperity with the civilian work force expanding and the number and rate of unemployed dropping. This is in contrast to a number of neighboring rural counties who have not been able to replace the jobs lost in the agricultural sector with jobs in the non-agricultural sector.

One method of analysis of the work force estimates for counties is to divide the reported activities into basic and non-basic activities. Basic activities are defined as those which export goods and services outside the county. In exporting goods and services, these activities inject outside money into the local economy. This "outside" money has a multiplier effect, in that it supports other non-basic activities within the county. The non-basic activities are defined as those which provide goods and services for consumption within the county.

An example of the basic and non-basic activities defined above might be provided by a worker at Texasgulf. This worker assists in the production of phosphate fertilizer which is sold for consumption outside of the county. The "outside" money paid for the product goes, in part, to pay the worker's wages. The worker's activity is basic. With the money the worker receives, he purchases items for his family, pays taxes which are used to educate his children and disposes of his "outside" money in other ways. The merchants who sell the worker items, the teacher who teaches his children and others who provide other goods and services are engaged in non-basic activities.

In this basic-non-basic approach, the export base is the major factor determining the level of the county income in that it supports the non-basic sector. An indication of the area's economic health can be gained by examining the ratio of basic to non-basic activities in a county. While a large ratio of basic to non-basic activities would generally indicate a healthy economy, it must be noted that a county that depends too heavily on one or a few large basic industries may prove unstable in an economic slump.

Table 9 utilizes employment figures in breaking down Beaufort County's employment into basic and non-basic activities for the years 1962, 1967 and 1972. The trend shows a slight decrease in basic activities vis-a-vis non-basic.

This has proven to be a national trend as service industries have come to play a larger role in the economy. Beaufort County's decrease is smaller than the national and state average. The success in locating industries in the county, ten industries between 1962 and 1972, has assured the county a healthy economy. The new basic activities support new non-basic activities.

TABLE 9 EMPLOYMENT ANALYSIS

Beaufort County
1962, 1967 and 1972

Employment Category	Number of Employees 1962	1967	1972
BASIC			
Manufacturing	2,010	3,260	4,310
Food	340	380	430
Wood & Lumber	360	350	380
Other Manufacturing	1,310	2,530	3,500
Non-Manufacturing	5,560	5,010	4,800
Agricultural	3,780	2,780	2,230
All Other Non-Manufacturing	1,780	2,230	2,570
TOTAL BASIC	7,570	8,270	9,110
TOTAL NON-BASIC	4,330	5,920	7,040
Total Employed	12,000	14,190	16,150
Percentage Basic/Total Employed	63.1	58.3	56.4

Not only have the increased job opportunities in Beaufort County provided jobs to county residents, but they have also provided job opportunities to workers commuting into the county. Between 1960 and 1970 the county has experienced also a 300 percent increase in the number of workers commuting into the county.

In 1960, Beaufort County had a net commuting-loss as workers commuted to other counties to work. By 1970, the county had a net commuting-gain of 561 workers. Table 10 examines the commuting patterns for Beaufort County in 1960 and 1970.

Beaufort County had a total of personal income of $117 million in 1972. This broke down on a per capita basis of $3,248, which is 72 percent of the national average and 86 percent of the state average.

Income data for families, often a more meaningful index of income, shows that while Beaufort County has not been successful in providing job opportunities, those job opportunities have not raised the median income above the state level. The median income for Black families is only $3,575. Almost 52% of all Black families have a family income below poverty level, and 62.9 percent have an income which is less than 125 percent of the poverty level. Table 11 examines family income levels for the county. The data is further broken down by race.

This income data gives an indication of the overall wealth and prosperity of the county's population. Incomes can serve as the bellweather of the local economy.

Another indication of economic health is the number of manufacturing firms in the county and the number employed by the firms. Table 12 lists manufacturing firms in Beaufort County.

TABLE 10 COMMUTING PATTERNS

Beaufort County, 1960 and 1970

County	1960		1970	
	Out-Commuting	In-Commuting	Out-Commuting	In-Commuti
Bertie	12	5	22	48
Carteret	12	--	14	0
Craven	176	74	169	334
Dare	0	0	7	0
Edgecombe	0	0	8	19
Halifax	0	0	7	--
Hyde	115	37	65	115
Lenoir	35	--	30	0
Martin	99	76	231	263
Nash	0	0	11	--
Onslow	0	0	15	17
Pamlico	40	12	19	150
Pitt	145	223	132	580
Tyrrell	11	--	0	0
Washington	70	31	286	110
Wayne	0	0	--	14
Wilson	0	0	20	0
Elsewhere	191	68	278	225
TOTAL	906	526	1,314	1,875
Live & Work in Beaufort County	9,972	9,972	11,751	11,751
Employed Residents	10,878	xxx	13,065	xxx
Persons Working in Beaufort County	xxx	10,498	xxx	13,626
Net Commuting-Gain (+) or Loss (-)	-380		+561	

Source: Employment Security Commission of North Carolina
North Carolina Commuting Patterns, 1960 and 1970.

TABLE 11

FAMILY INCOME DATA

Beaufort County, 1969

	Beaufort County	North Carolina
All Families		
Median Income	$6,435	$7,774
Percent Receiving Public Assistance	7.8	4.4
Percent Less than Poverty Level	24.9	16.3
Percent Less than 75% Poverty Level	17.9	11.0
Percent Less than 125% Poverty Level	32.4	22.3
Black Families		
Median Income	$3,575	$4,803
Percent Receiving Public Assistance	18.8	4.37
Percent Less than Poverty Level	51.1	38.7
Percent Less than 75% Poverty Level	38.0	27.3
Percent Less than 125% Poverty Level	62.9	49.3

SOURCE: U.S. Census, 1970.

TABLE 12

MANUFACTURING FIRMS

Beaufort County, 1975

Firm	Location	Product	Employment Range
Aurora Packing Co.	Aurora	Crab Meat	50-99
Texasgulf, Inc.	Aurora	Phosphoric Acid Diammonium Phosphate Phosphate Rock Granular Triple Superphosphate	500-999
Baker Crab Co.	Belhaven	Crab Meat	50-99
Belhaven Feed Mills, Inc.	Belhaven	Livestock Feed Liquid & Dry Fertilizer	5-9
Belhaven Fish & Oyster Co.	Belhaven	Crab Meat	50-99
Belhaven Manufacturing Co.	Belhaven	Ladies Outwear	50-99
Harris Furniture & Upholstery Co.	Belhaven	Furniture	1-4
Blue Channel Corp.	Belhaven	Canned Crab Meat	100-249
Gwinn Engineering Co., Inc.	Belhaven	Dredges Molded Polyurethane	5-9
Younce & Ralph	Belhaven	Lumber Pine	20-49
Hatteras Industrial Corp.	Chocowinity	Rubber Linings Metal Fabrication	5-9
The Singer Co.	Chocowinity	Wooden Furniture	250-499
Coastal Lumber Co.	Pantego	Lumber, Wood Chips	20-49
Kamlar Corp.	Pantego	Pine Bark Products	20-49
Pungo Machine Shop, Inc.	Pantego	Job Shop	5-9
F. C. Howell & Son	Pinetown	Dimension Stock Hardwood	20-49
Beaufort County Iron Works, Inc.	Washington	Machine Shop	1-4
Coca Cola Bottling Co., Inc.	Washington	Carbonated Beverages	10-19
East Coast Electronic Weighing, Inc.	Washington	Wheel Load Weigher On Board Truck System Special Weighing Equipment	5-9
Edinburg Hardwood Lumber Co.	Washington	Hardwood Furniture Squares Logs Hardwood, Chips	20-49
Flanders Filters, Inc.	Washington	Air Filters Glass Fibre Filter Papers	50-99
Foster Wheeler Corp.	Washington	Valves Nuclear Power	20-49
Hackney & Sons, Inc.	Washington	Truck Bodies, Delivery Vans	100-249
Samsons Mfkg. Corp.	Washington	Shirts	500-999
J. S. Hill Construction Co.	Washington	Ready Mix Concrete	10-19
Jackson Bedding Co.	Washington	Bedding Products, Furniture	1-4
Mallisons Climate Craft	Washington	Sheet Metal Work, Heating & Air Conditioning	10-19
Maola Ice Cream Co., Inc.	Washington	Ice Cream	20-49
Mason Lumber Co.	Washington	Lumber	20-49
Moss Planing Mill	Washington	Lumber, Millwork	500-999
National Spinning Co., Inc.	Washington	Yarn	2,500 & Ov
Roberson Beverages, Inc.	Washington	Soft Drinks	100-249
Scovill Manufacturing Co.	Washington	Household Appliances	1,000-2,49
Seacrest Marine Corp.	Washington	Boats	100-249
Washington Beverage Co.	Washington	Carbonated Beverages	10-19
Washington Garment Co.	Washington	Children's Dresses	100-249
Washington Graphics Inc.	Washington	Commercial Printed Material	1-4
Washington News Publishing Co.	Washington	Newspaper	20-49
Washington Packing Co.	Washington	Sausage Products, Pork Products	10-19
R. S. Wiley & Son	Washington	Lumber Hardwood	5-9

B. EXISTING LAND USE

Beaufort County has a total of 618,179 acres within its boundaries. Water areas comprise 88,836 acres, or 14.4 percent of this total area. The predominant land use in the remaining land area is forestry, which utilizes 340,497 acres, or 55.1 percent of the total acreage. This is followed by cropland, with 137,449 acres (22.2 percent); other land, such as farm roads, feed lots, mines, etc., with 28,954 acres (4.7 percent); urban and built-up with 11,983 acres (1.9 percent); pasture, 8,157 acres (1.3 percent); and federal land with 2,300 acres (0.4 percent).

Between 1959 and 1967, Beaufort County had a 137.5 percent change in urban and built-up land. There was a small increase in other lands category, 18.1 percent, and cropland, 5.8 percent. There was a decrease in pasture, -17.4 percent, and forest, -5.4 percent.

An examination of the existing land use map will reveal that the county's population is largely grouped in the western portion of the county. Small concentrations exist in the eastern population; but, by and large, the population is centered around Washington. Conceptually, the county can be viewed as having the eastern portion devoted to resource production--forestry, mining, and agriculture--while the area around Washington is the residential and commercial center.

This seems to be the trend in development--with the townships in the eastern portion of the county losing population, and most new development taking place around Washington, especially between Broad Creek and Washington.

Although there has been no effort on the county level to influence development patterns, there have been few problems encountered with land use compatibility. The major problem which has resulted from unplanned development has been unsightly riverfront development. Largely, this development has

occurred in a helter-skelter fashion to the detriment of the Pamlico River, one of the county's most valuable resources. Areas which are likely to experience major changes in predominant land use are the areas north of Aurora and in the vicinity of Pamlico Beach. Phosphate mining is scheduled to begin in both of these areas in the near future.

C. CURRENT PLANS, POLICIES, AND REGULATIONS

1. Plans and Policies

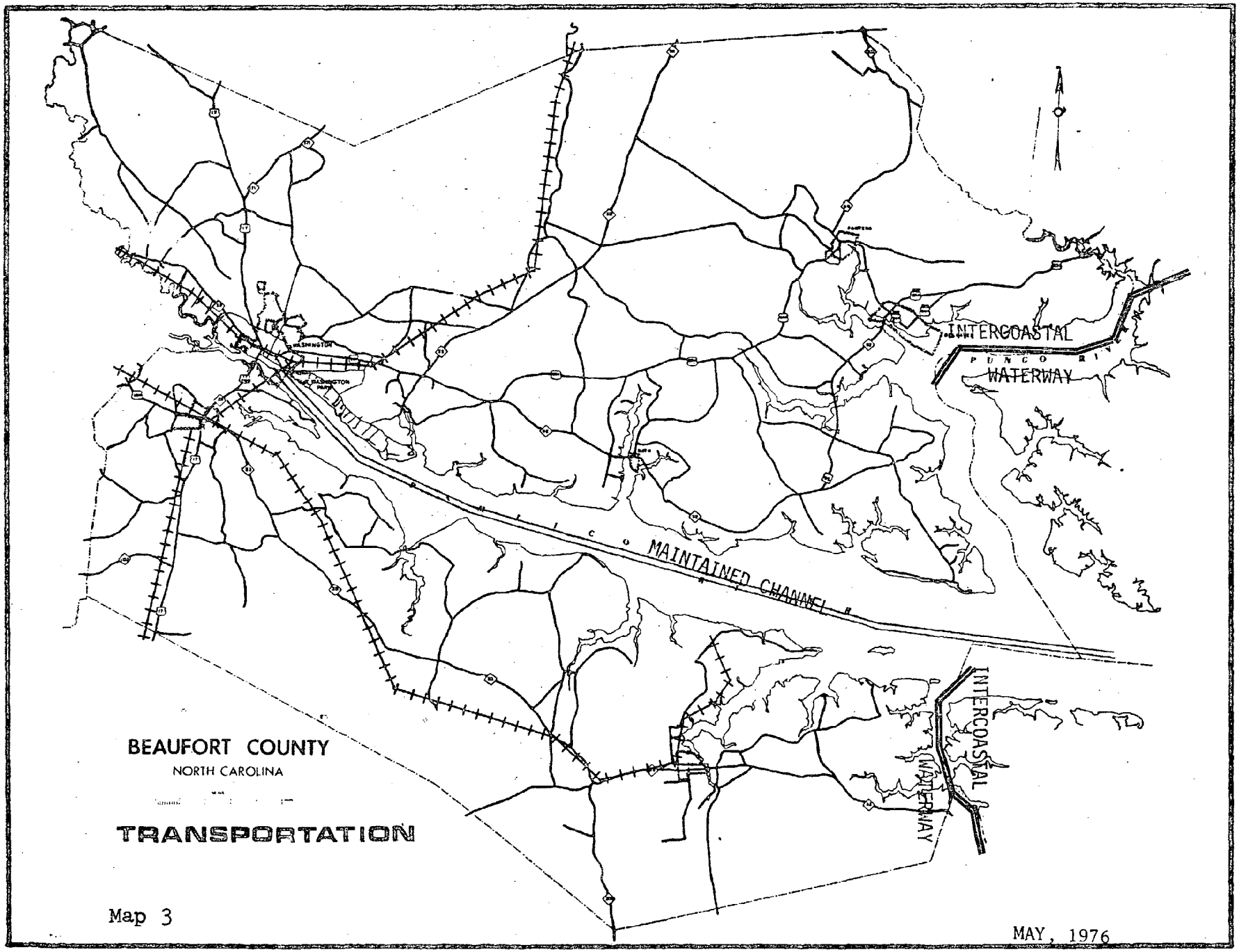
Transportation Plans - Beaufort County has no transportation plans. The following is an analysis of the county's transportation systems.

Roads and Highways

Primary roads in Beaufort County include U. S. 264 and N. C. 33, providing east-west transportation, and U. S. 17, N. C. 32 and N. C. 305, providing transportation in a north-south axis. The two principal routes are U. S. 17 and U. S. 264 and, as such, are highest in priority for improvement. The State DOT has in its seven year plan four-laning a portion of U. S. 17 in Washington.

Many groups in the county, led primarily by the Chamber of Commerce, have pushed for the upgrading of U. S. 17 and U. S. 264 to four lanes. While the right-of-way has been purchased on U. S. 17, little progress has been evidenced toward upgrading of these two vital highway routes.

In addition to the above primary routes, transportation in the county is centered on secondary roads which lace the county. There are 369 miles of paved secondary roads and 355 miles of unpaved secondary roads in the county.


INTERCOASTAL
WATERWAY
MAINTAINED CHANNEL
INTERCOASTAL
WATERWAY
BEAUFORT COUNTY
NORTH CAROLINA
TRANSPORTATION
Map 3
MAY, 1976

The major obstacle to highway transportation in the county is the Pamlico River. Local groups have supported a proposal for bridging the river in the Bayview area and thus providing an eastern link between the northern and southern halves of the county. Those efforts have failed and are unlikely to succeed in the future. Building of such a bridge would be a major expense and is a project unlikely to be undertaken by the State Department of Transportation. Any plan for the future development of Beaufort County, in order to be realistic, must take into account the highway transportation barrier created by the Pamlico River.

Rail Transportation

Beaufort County is served by the Seaboard Coast Line and the Norfolk-Southern Railroad. Seaboard Coast Line serves Washington with a branch line. Norfolk-Southern serves Chocowinity, Pinetown and Washington with a main line and has branch lines serving Belhaven, Pantego, Aurora and the Texas Gulf Phosphate mining complex. No passenger service is available.

Air Transportation

Beaufort County has no commercial air service. The county is served by four airports: Albert J. Ellis Airport (Jacksonville), Seymour Johnson Air Force Base (Goldsboro), the Simmons-Nott Airport (New Bern), and Stallings Field (Kinston). Commuter service can be obtained at Greenville through Wheeler Airlines. Serving general aviation, Washington Municipal Airport has three 4,500-foot paved runways and Belhaven has a 2,600-foot grass strip. In 1973, 25 general aviation aircraft were based in the county.

Trucking Companies

Beaufort County has one motor freight carrier terminal, Estes. Motor freight carriers certified to stop in the county include Bell, Carolina-Norfolk, Everett, Fleming, Helms, Hemingway, JML, Jones, McLean, New Dixie, Pilot, Northeast, Thurston, Virginia-Carolina and Estes. Piggyback service is available with the nearest ramp in Greenville.

Water Transportation

Although the Pamlico River is the dominant physical feature in Beaufort County, present water transportation is limited. A 12-foot deep channel connects the City of Washington with the Intercoastal Waterway. Bulk cargo is moved to and from the county over this route. The major user is the Texas Gulf Phosphate operation, which transports phosphate from the mine site to the State Port in Morehead City.

The possibility exists that the Pamlico River could be used more for commuting purposes. Large numbers of people move daily in an east-west direction in the county,commuting to and from jobs. Some type of mass transit might be possible using the river. Hydrofoil boats are used in Europe today to turn rivers into highways for millions of people. Such a system used in Beaufort County could use the Pamlico River to join the county,rather than create a barrier.

Bus Service

Beaufort County is served by Carolina Trailways with a terminal in Washington.

Community Facilities Plan - Beaufort County has no comprehensive community facility plan. Such a plan is presently being prepared for the county by the Department of Natural and Economic Resources' Division of

Community Assistance. The plan will examine the capital needs of the county for a 20 year planning period and will establish a capital budgeting process.

The Region Q Water Management Plan, completed in 1975, examines water and sewer needs of Beaufort County for a 50-year planning period. This information is presented later in this plan.

Two '201' areas have been designated in Beaufort County. One is located in and around Belhaven, and the second covers Washington, Washington Park, Chocowinity and the surrounding area. Plans are being developed for wastewater treatment in these areas. See the Belhaven and Washington plans for more complete information on these '201' areas.

Utility Extension Policies - Beaufort County has a policy for the extension of water and sewer lines. The policy establishes a formula based on the tax value of the project. This policy has been used one time. None of the current elected officials or employees of the county were aware the policy existed.

Recreation Policy - With the advent of Revenue Sharing, the county began making recreation grants available to local governments. In 1975 the County Commissioners established a county recreation advisory committee to assist the commissioners in determining recreation needs in Beaufort County. The current policy of the advisory committee and the county commissioners is to continue making recreation grants to local communities.

Open Space Policies - Beaufort County has no policy for the acquisition or preservation of open space.

Prior Land Use Plans - Beaufort County contracted with the North Carolina Department of Conservation and Development in 1967 to prepare an economic potential study and a land potential study. These studies provided a look

at Beaufort County and its needs. As a result of the study, the county planning board recommended the adoption of subdivision regulations. The proposal met stiff opposition, was permanently tabled, and, as a result, the planning board disbanned. As a result, neither plan had any beneficial impact on land development patterns in the county. The county was without a planning board until January, 1975.

Prior Land Use Policies - Beaufort County had no prior land use policies. It has had industrial development policies which would have a significant impact on land use patterns. In February, 1962, the county appropriated $5,000 to match state and federal funds for a survey of the phosphate deposit in Beaufort County.

In May, 1962, the county adopted a resolution requesting the State to postpone leasing the river bottoms" ...until such time as the survey and study of phosphate deposits is completed and until a thorough investigation reveals what damage will be done to the river bottoms and....how the land owners in Beaufort County will be affected..."

In June, 1962, another resolution was passed requesting that the state "...provide in any leases for the mining of phosphate or other minerals under the bottom of the Pamlico and Pungo Rivers reasonable safeguards for the protection" of wildlife, fish, recreation and shore lines.

In November, 1966; March, 1969; and April, 1969, resolutions were passed endorsing a bridge-dike across the Pamlico River.

2. Local Regulations

Counties in North Carolina have available to them a broad range of regulatory powers which enable local government to influence land use decisions. Below are listed a number of these regulations and their status in Beaufort County.

Zoning Ordinance - Beaufort County does not enforce a zoning ordinance in any form.

Subdivision Regulations - Beaufort County does not enforce any subdivision regulations. The county commissioners have recognized the need for subdivision standards in the county and have requested that the planning board prepare subdivision regulations for consideration.

Floodway Ordinances - Beaufort County is not presently enforcing any floodway ordinances. The county is under the emergency flood insurance program. Flood prone areas should be mapped by 1979. Following mapping of the flood prone areas, the county will enforce floodway ordinances.

Building Codes - Beaufort County is presently enforcing the North Carolina Plumbing and Electrical Codes. The county is not enforcing any other form of building codes at this time.

Mobile Home and Travel Trailer Ordinance - Beaufort County passed an ordinance in September, 1975, establishing minimum standards for mobile home and travel trailer parks. The ordinance also required tie-downs on all mobile homes in the county.

Septic Tank Regulations - The Beaufort County Health Department enforces septic tank regulations. These regulations are more stringent than the regulations promulgated by the N. C. Department of Human Resources.

Historic District Regulations - Beaufort County does not enforce any historic district regulations. However, there is a county historic properties commission.

Nuisance Regulations - Beaufort County has no nuisance regulations which impact land use patterns.

Dune Protection Ordinances - Beaufort County has no dune protection ordinances.

Sedimentation Codes - The county has no sedimentation codes. The Mobile Home & Travel Trailer Park Ordinance does requre that a sedimentation control plan be filed with the plat. This provision will be incorporated into future county ordinances, such as subdivision regulations.

Environmental Impact Statement Ordinance - While the county has no EIS ordinance, an EIS provision is included in the Mobile Home and Travel Trailer Ordinance.

3. Federal and State Regulations

As can be seen above, Beaufort County enforces few regulations which have a significant impact on land use decision. Of more consequence are the myriad of state and federal regulations which impact on the citizens of Beaufort County.

The state guidelines for preparation of these land use plans require that these state and federal regulations be listed and discussed. The N. C. Department of Natural and Economic Resources was to prepare such a listing and discussion for inclusion in their plan. At the date of this writing, the listing has not been presented to local governments for inclusion into the Plan.

III. MAJOR LAND USE ISSUES
(PUBLIC PARTICIPATION ACTIVITIES)

A. IDENTIFICATION AND ANALYSIS OF MAJOR LAND USE ISSUES

The framework of this plan is the identification of major land use issues and proposed courses of action to deal with the identified issues. In identifying the major land use issues discussed in this plan, seven subject areas were examined. These were: (1) the impact of population and economic trends; (2) the provision of adequate housing and other services; (3) phosphate mining; (4) other industrial development; (5) agriculture, forestry and commercial fishing; (6) local control over environmentally sensitive areas; and (7) recreation related development.

The issue of how fast and where growth would take place in Beaufort County was considered a major land use issue. While in the past Beaufort County has not lost a large portion of population like other rural areas, there has been a shift in population distribution within the county. Population has shifted from the rural eastern portions of the county into the more urbanized area around Washington. This is most evident in Long Acre Township, in the area between Washington and Broad Creek.

Beaufort County is projected to gain in population over the next fifty years. Is this growth to be encouraged to occur as rapidly as possible or will attempts be made to control the rate of growth? The citizens of Beaufort County indicated they wanted a slow, orderly pace of growth. This would call for actions by local government to control the rate of growth in Beaufort County.

Where should future growth be accommodated? If no action were taken by local government, it is anticipated that the past trend of development being accommodated in the Washington area would continue. Most of this development is located outside of the City of Washington Planning and Zoning jurisdiction. No action by local government would mean that patterns of conflicting land use would

likely develop in the growth area. High density development relying on septic tanks for sewage disposal would create water quality problems in the area.

The citizens of the county indicated that they would like to center growth around the towns in the county. This concentrating of population will minimize the cost of providing public services by local government. While a majority of future growth will probably occur in the Washington area, there was a desire by the county to ensure that the smaller towns such as Belhaven and Aurora remain viable towns in order to serve the population in their section of the county.

A second issue identified as a major land use issue is that of protecting the quality and natural setting of the county's waterways. The Pamlico and Pungo Rivers and their tributaries are considered the major asset of the county by many people. The quality and natural setting of the county's waterways are threatened in many ways.

Portions of the county's waterways are underlaid by phosphate deposits. These deposits are controlled by the state. At the present time Texasgulf has leased from the state mineral rights for a portion of the Pamlico River that is in front of its processing plant. While there are presently no plans by Texasgulf to mine the phosphate under the river, the maintenance of the lease agreements with the state leaves the possibility open that they may be mined in the future. Open pit mining of the river would involve diking off portions of the river in order that a dry pit could be obtained.

The citizens of the county were concerned that the mining of the river would alter the natural setting of the county's waterways and that the mining would have adverse long-term environmental impacts. It was felt that the county should register with the State opposition to mining of the river.

Another project which threatens the quality and natural setting of the river is a proposal to dam the Pamlico River. This is a proposal which has

surfaced several times. The proposed project, which would not actually dam the river, but would create two jetties with a gap in the middle to allow a continuous flow of water, is perceived as having several benefits. Its proponents state that the project would (1) provide flood protection to large areas of the county, (2) ensure a large body of fresh water for the development of the Washington area, (3) provide a transportation link across the river in the Bath area, and (4) provide fresh water that could be used by the phosphate mining concerns both in processing and to recharge the fresh water aquifer affected by the mining process. Opponents of the project feel that the benefits are overstated and that the environmental impacts, such as destruction of portions of the estuary, would make the project an environmental disaster.

The damming of the Pamlico River is backed by such groups as the Washington Chamber of Commerce. However, a majority of the citizens in the county oppose the project. The County Commissioners had considered positive and negative impacts of such a project and feel that more study of the proposal is necessary before it can be determined whether the benefits outweigh the cost.

The water quality of the county's waterways is threatened by development in the county. Much of the development occurring in Beaufort County relies on septic tanks for sewage disposal, despite the fact that few soils in the county are suitable for septic tanks. The result is pollution of our shallow ground water and surface waters.

The Division of Environmental Management, N. C. Department of Natural and Economic Resources, has identified four areas in Beaufort County where there is concern over pollution of surface waters from development relying on septic tanks. These areas are:

(1) The north shore of the Pamlico River from Washington Park to Broad Creek. This area has very dense development which is unsewered. There is probably some direct discharge into the waterways. Marinas, boat basins and heavy boat traffic on Broad Creek constitute a potential problem. This whole area presents potentially severe problems.

(2) Bath - There is moderately dense development on Bath and Back Creeks which is unsewered. There is pressure for additional development and marinas. The soil and water table is generally suitable for septic tanks but continuing development poses a potential for water quality degradation.

(3) North shore of the Pamlico River below Bath - There are isolated pockets of dense development with increasing pressure for additional development. The soil is marginal to unsuitable with a high water table in some areas.

(4) Chocowinity Bay Area - This area is developing with pressure for additional development. Soil is generally suitable for septic tanks. Should not create water quality problems if density is controlled.

The North Carolina Board of Water and Air Resources classifies all streams in the state as to their best usage. This, in effect, establishes water quality standards. They provide a guide in determining what level of treatment is necessary prior to discharge of waste into the streams. A brief explanation of the "best usage" for which waters in each class must be protected is given as follows:

Fresh Waters

Class A-I - Suitable as a source of water supply for drinking, culinary, or food processing purposes after treatment by approved disinfection only, and any other usage requiring waters of lower quality.

Class A-II - Suitable as a source of water supply for drinking, culinary, or food processing purposes after approved treatment equal to coagulation, sedimentation, filtration, and disinfection, etc., and any other usage requiring waters of lower quality.

Class B - Suitable for outdoor bathing, boating and wading, and any other usage requiring waters of lower quality.

Class C - Suitable for fish and wildlife propagation. Also suitable for boating, wading, and other uses requiring waters of lower quality.

Class D - Suitable for agriculture and industrial cooling and process water supply, fish survival, navigation, and any other usage, except fishing, bathing, or as a source of water supply for drinking, culinary or food processing purposes.

Tidal Salt Waters

Class SA - Suitable for shellfishing for market purposes and any other usage requiring waters of lower quality.

Class SB - Suitable for bathing and any other usage except shellfishing for market purposes.

Class SC - Suitable for fishing, and any other usage except bathing and shellfishing for market purposes.

Swamp Waters. Those waters which are topographically located so as to generally have low velocities and certain other characteristics which are different from adjacent streams draining steeper topography are designated by the letters "SW" in the schedule.

The large number of streams in Beaufort County and the wide range of classifications exhibited by those streams make it very difficult to map the streams and code them as to classification. For this reason, a listing of the streams in the Tar-Pamlico basin as pertains to Beaufort County is provided. This list is contained in the North Carolina Administrative code.

A final type of development which poses a problem to the county's waterways is marina development. There is increasing pressure for this type of development in Beaufort County. The county commissioners are being asked by groups such as the U.S. Army Corps of Engineers to comment on applications for permits for marina developments. It is difficult, if not impossible, for the county to respond without having a stated policy. Beaufort County needs to develop a policy on marina development in the county.

The most controversial land use issue discussed was the issue of phosphate mining. Public opinion was divided on what the county's posture should be toward this industry which has such a large impact on the local economy, land use patterns and environment.

Large tracts of potentially recoverable phosphate reserves are owned by Texasgulf, North Carolina Phosphate, FMC, and Weyerhaeuser. Also, 10,000 acres of state-owned land in the Pamlico estuary are under lease for potential extraction. Open cast mining is currently being employed to recover thick high grade ore in the Lee Creek area. Expansions of operating plants and other developments are underway. Hydraulic mining thru bore holes has been tested, and plans to develop some deeper high grade ores in the Pungo River-Pamlico River peninsula area are underway.

Mining and reclamation regulations involved with ore extraction are under the auspicies of the Department of Natural and Economic Resources of North Carolina as set out in the Mining Act of 1971. The agency is amply staffed with competent professionals to regulate the operations.

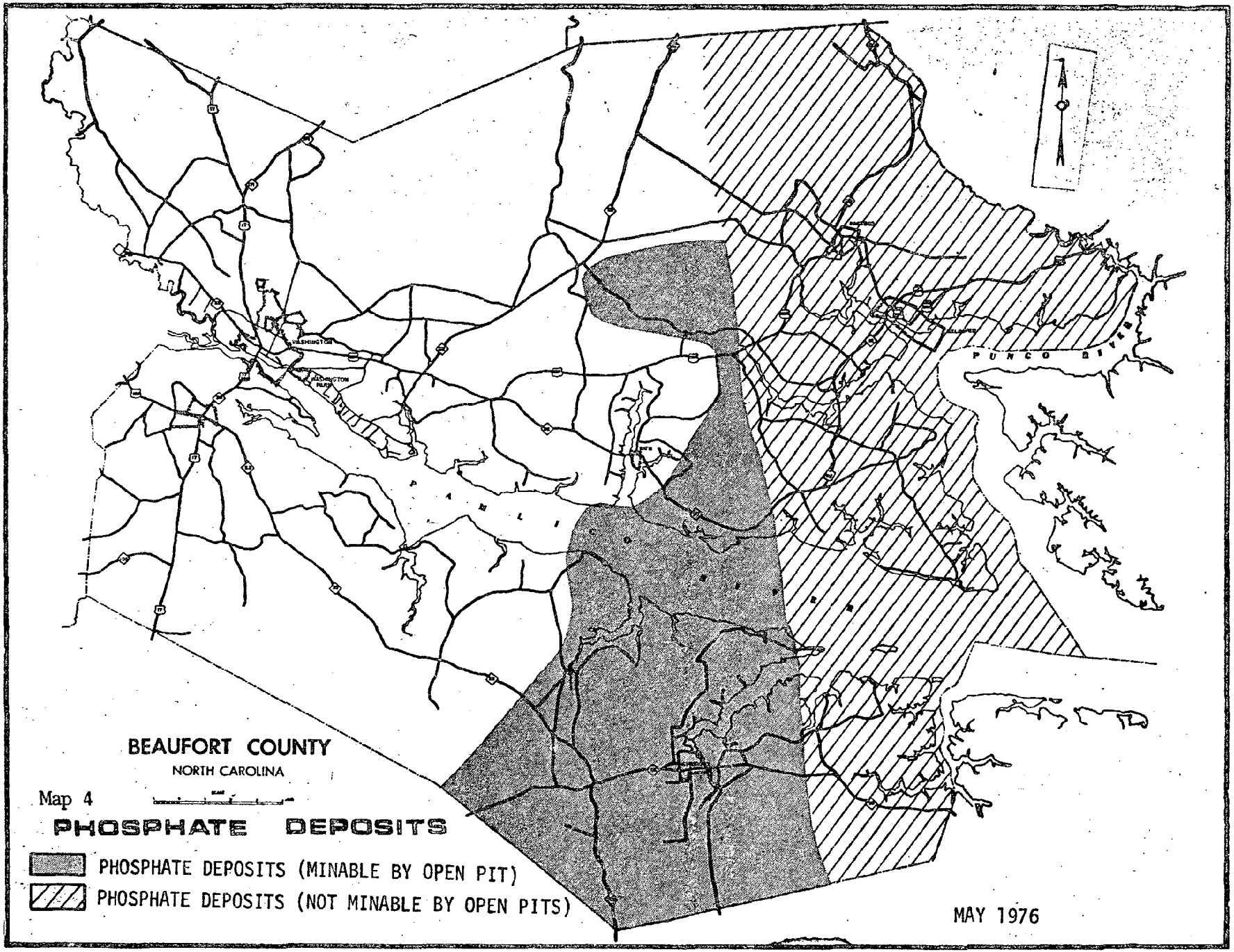
The ground water* and surface water usage involved with the phosphate mining and processing operations are likewise monitored and regulated by the Department of Natural and Economic Resources under the Water Use Act and Well Construction Acts of 1967. These acts regulate depressurization of the aquifer by the mining companies. This depressurization affects the water level in wells and may cause salt water intrusion into fresh water aquifers.

*Groundwater - Water standing in or moving through the soil and underlying strata.

Phosphate mining and, more importantly, the processing of the recovered ore is an important industry of Beaufort County and of the state. The current operations are one of the largest of its kind in the world, and future developments promise much larger establishments. The industry is directly related to agriculture whereby phosphate is an absolutely essential mineral, used along with nitrogen and potash, to enhance the growth of crops. With the increasing United States and world demand for food, the usage of phosphate fertilizers will continue to expand while sources of the raw materials diminish. The long-range projections of the phosphate industry in Beaufort County are for steady growth and security to provide quality employment for additional work forces for many decades. Currently, over $13 million is annually pumped into the local economy thru salaries, property taxes and procurements. Revenue from property taxes from Texasgulf phosphate operations amounts to $\pm$30% of the entire county property tax returns. Expansions will, in turn, increase these revenues, subsequently increasing the affluence of the entire population of the county.

Regulations of mining activities has been a function of state government to date. The state has a mining act which regulates the mining itself, and regulations concerning the amount of water which can be withdrawn to depressurize the aquifer so that mining can take place. Local government can, and should, also play a regulatory role in assuring that the mining can continue and to assure that the continuing mining does not disrupt desired features within the county.

Several existing population centers are located over phosphate deposits. Most of the people living in these centers do not want their communities disrupted and dislocated by mining activities. Therefore, the Town of Aurora, Bath, Pantego, and Belhaven should take steps to zone within their territorial jurisdiction to prohibit mining activities from encroaching. The county should


PUNCO RIVER
BEAUFORT COUNTY
NORTH CAROLINA
Map 4
PHOSPHATE DEPOSITS
PHOSPHATE DEPOSITS (MINABLE BY OPEN PIT)
PHOSPHATE DEPOSITS (NOT MINABLE BY OPEN PITS)
MAY 1976

institute zoning to protect unincorporated population concentrations such as Bayview.

Many citizens are concerned that open pit mining will begin on the north side of the Pamlico in the Bath area. Neither N. C. Phosphate or Texasgulf, the two companies mining or planning to mine by the open pit method, have any plans to mine on the north side of the river at present. It is felt that mining in that area in the near future is unlikely due to (1) the fragmented land ownership pattern in the area, (2) the presence of population centers that could be protected by zoning and (3) the location of process plants on the south side of the river which would present transportation problems.

The land underlying the rivers is under state control and the state will make the decision on whether or not to allow mining in these areas. However, due to local desires to protect the integrity of the county's waterways, Beaufort County should notify the state of its opposition to mining of the rivers unless competent studies demonstrate that such mining can be accomplished without permanently changing the character of the rivers or creeks.

Another major land use issue was industrial development. In order to achieve the growth policy stated earlier, it will be necessary to selectively recruit industries that meet certain needs in the local economy. The citizens of the county desired to recruit high quality industries which would meet the labor demands of the area. Ideally, these industries should utilize local products such as agricultural goods or fish products, thereby strengthening the existing economy.

The fifth major land use issue identified dealt with agriculture, forestry and commercial fishing. These industries, which are dependent upon the county's productive natural resources, have historically played a major role in Beaufort County.

The estimated cash farm income for Beaufort County in 1975 was $56,975,841.42. As you can see, this is an important segment of the local economy. If agriculture is to continue to prosper it is important that the impact of local government's actions on agriculture is evaluated. In developing a long range development plan for the county, prime agriculture must be protected. But, before it can be protected, it must be identified. Beaufort County should begin a program of identifying its prime agricultural land. Once identified, the county can take actions to protect it.

Much of the agriculture that is conducted in Beaufort County is hampered by a high water table, and it is necessary to drain the land to farm it. Farmers in the county have encountered increasing difficulties in securing the permits necessary for drainage, particularly if the drainage canals are to traverse marsh grass. It is essential that the process to obtain these permits be streamlined to insure that minimum delays are encountered by a farm seeking to drain his land. One avenue suggested would be to allow the local Soil and Water Conservation District administer permits for drainage.

In addition to agriculture, forestry and commercial fishing were found to be important uses of productive natural resources. Local government is limited in its impact on these two industries. Beaufort County should seek to ensure that the natural resources that these industries are dependent on, remain in abundant supply.

Beaufort County has a number of environmentally sensitive areas which will be designated as Areas of Environmental Concern by the CRC. The CAMA

legislation allows local governments to issue permits for minor development in AEC's. The citizens of Beaufort County feel that control should remain on the local level and therefore favored enforcement of permits for minor development in AEC's by the county.

In addition, it was felt that the county's development plans should seek to protect these AEC's. For example, it was felt that while Goose Creek State Park would be an AEC that the land adjoining it should be protected to ensure that development occurring in the vicinity of the park would be compatible with it.

The final major land use issue identified by the county was the need to deal with recreational development. Beaufort County's major attraction, the natural environment and the activities it supports (hunting, fishing, boating, and camping) creates additional development pressures. People outside of Beaufort County enjoy these activities as well. As a result second homes, marinas, campgrounds and commercial establishments are built to cater to those who visit. Adding to these pressures is the establishment of a state park at Upper Goose Creek, further development of Historic Bath and activities related to the historic site. These attractions will mean more people coming to Beaufort County. Even the ferry between Swan Quarter and Ocracoke will mean more people coming through the county. If the growth that occurs is not guided, then that growth could destroy the very thing that created it - the first-rate natural environment.

B. ALTERNATIVES CONSIDERED IN THE DEVELOPMENT OF GOALS AND OBJECTIVES

A number of alternatives to the selected goals were considered and rejected. These included:

1) Growth - A no growth alternative and rapid growth alternative were considered. Both were rejected as incompatible with the public's desires. It was felt that rapid growth would not enable the retention of the quality of life desired by most citizens. The no growth alternative was viewed as unrealistic in view of the development pressures facing the county.

2) Population Distribution - A laissez-faire alternative and a dispersed population alternative were considered. The laissez-faire approach would result in the additional development occurring only in the Washington area and possibly to a small extent in Aurora. This would be counter to the county's desire to maintain the present towns in the county as viable communities able to serve the surrounding areas. It would also result in undesirable development patterns in the Washington area. The dispersed population alternative would have scattered population throughout the county with the adverse impacts of higher service cost and inefficient land use patterns. The alternative chosen, to center future growth among existing towns throughout the county, would allow for more efficient utilization of service and a more efficient land use pattern. It would also protect agricultural land from encroachment of urban-type development.

3) Phosphate Mining - The phosphate mining issue was a complex issue with many facets. Alternatives considered but rejected were (a) no action by the county leaving the issue to be decided by the state, (b) land use regulation which would have pro-

tected potential phosphate deposits from incompatible development, and (c) favoring mining at all environmental cost. The question of the state and national interest in the phosphate deposit was addressed. Local governments role is in monitoring permit letting by state and federal agencies. Local regulations should be used in the event state and federal regulations fail to represent local interest.

4) Other Major Land Use Issues - The remaining land use issues were clear cut. The only other major alternative considered was to do nothing at the local level.

5) Housing and Other Services - It was felt that housing was not a major land use issue in Beaufort County. The private market and public housing authorities are meeting the demand in the county. Other governmental services were not perceived as major land use issues but as tools to be used by local government in guiding growth.

6) The Protection of Cultural and Historical Resources - The protection of cultural and historical resources was not identified as a major land use issue. The cultural and historical heritages are viewed by the citizens as valuable resources. Beaufort County has a very active Arts Council and Historic Properties Commission. These groups have been successful in protecting the county's cultural and historical resources. Plans for, and control of growth in the county should include provisions for conserving these resources.

C. GOALS FOR DEVELOPMENT

Goals provide an ideal or target for which to aim. The following goals and objectives were established for Beaufort County. The goal is a broad, general area or issue such as how fast growth should occur. The objectives listed under that goal describe specifics such as where growth should occur. When taken together, these goals and objectives draw a picture of what Beaufort County should look like in the future. Your elected officials will constantly refer to these goals while considering matters related to the future growth and development of Beaufort County. The goals and objectives for Beaufort County are:

I.

GOAL: To guide growth in Beaufort County so that it occurs in a slow, orderly manner.

OBJECTIVES:

- To center future growth around the towns in the county.
- To zone areas of rapid and intensive growth throughout the county and along major thoroughfares to ensure that future growth occurs in an orderly manner.
- Public facilities, such as water and sewer, schools, etc. will be provided in a manner that encourages development to occur in areas best suited for development.
- County regulations will consider natural constraints on development such as soil limitations, fragile areas, etc.
- Building codes, subdivision regulations and other minimum standards will be enforced to ensure that the development that takes place in Beaufort County is of high quality.
- Industries will be recruited in a manner consistent with this goal.
- Planning for and control of growth in the county should include provisions for conserving valuable cultural and historical resources.
- To seek the upgrading of highways U. S. 17 & 264.

II. GOAL: To protect the quality and natural setting of the county's waterways.

OBJECTIVES:

-To oppose any land using project or development such as mining or damming of the river which cannot be shown by competent studies to have no harmful impact on the natural setting environmental quality of our waterways.

-To discourage location of industries or development in Beaufort County which would be detrimental to water quality.

-To develop local regulations which would ensure that waterfront development does not constitute visual pollution or contribute to water quality problems.

-To develop a policy regarding water-based recreation development, such as marinas.

III. GOAL: To encourage the further development of phosphate mining while ensuring that the natural environment and lifestyle of Beaufort County is protected.

OBJECTIVES:

-To register with the State, which regulates mining, the county's desire to ensure that the environment is protected during and after mining activities.

-To encourage that open-pit mining remain on the south side of the river for the foreseeable future.

-To oppose mining of the rivers and creeks until a competent study can be conducted as to the impact on such mining.

-To zone existing unincorporated residential areas to protect them from undesirable land uses.

-To encourage incorporated towns to exercise land use controls to protect their residential areas from undesirable land uses.

-Mining should not be allowed to jeopardize the ground water supply of the area.

IV. GOAL: To encourage quality industries to locate in Beaufort County.

OBJECTIVES:

-To recruit industries at a pace consistent with the county growth policy.

-To recruit industries which would utilize local products such as agricultural goods and fish products.

-To recruit industries to meet the specific labor requirements of various areas of the county.

-To identify markets within reach of Beaufort County, available labor and resources to aid in industrial recruitment.

V. GOAL: To develop the agricultural, forestry, and commercial fishing sectors of our local economy.

OBJECTIVES:

-To identify and protect our prime agricultural land.

-To remove unnecessary impediments to maintaining agricultural drainage canals and other conservation practices.

-To continue and further develop extension services such as agricultural education, Agricultural Extension Service and Soil Conservation Service.

-To stress the importance of proper forest management.

-To protect habitats essential to fish production with reasonable consideration for farm drainage.

VI. GOAL: To maintain local control over environmentally sensitive areas and implementation of the plan.

OBJECTIVES:

-To issue permits locally for minor development in areas designated as Areas of Environmental Concern by the Coastal Resources Commission.

-To design County development plans so as to protect environmentally sensitive areas.

-To protect Goose Creek State Park from conflicting land uses.

-To insure that local desires and concerns are considered by State and Federal agencies.

-To insure administration of local matters by local people familiar with local problems.

-To speed the issuance of permits for desirable projects.

VII. GOAL: To ensure that recreational developments such as camping areas, marinas, travel trailer camps, second home developments, etc., will occur in a manner that will protect the natural amenities that attracted such development.

OBJECTIVES:

-To establish and enforce minimum standards for recreation-based development.

-To regulate corridors leading to recreation-based developments so as to avoid congestion, unsightly construction, and unnecessary alteration of natural amenities.

D. PROCESS USED IN DETERMINING GOALS

A process known as the nominal group process was used to determine Beaufort County's goals. These goals were determined at a workshop held in August, 1975, and attended by planning board members, elected officials, and members of the Citizen Advisory Council.

Upon arriving at the workshop, participants were provided with the results of the efforts to obtain citizen input into the planning process. Results of the county-wide survey and small group discussions were to be considered in conjunction with the results of their own personal interviews of the county's populace. The participants were divided into small groups to identify and to discuss issues facing Beaufort County. These issues were prioritized in each group.

Following discussion by each group, the issues from each group were listed for display. All of the participants then meet to discuss the identified issues. Following this discussion, the issues were once again prioritized by the group as a whole.

Staff then took the results of the workshop and grouped compatible issues into broader headings entitled goals. These goals were then submitted to the planning board for action.

For a detailed discussion of how this process fits into the overall public participation process, see the following section.

E. SECURING PUBLIC PARTICIPATION

Beaufort County's public participation program was developed by its Planning Board generally following the suggestions outlined in the Coastal Resources Commission's "Handbook on Public Participation." In addition to the steps outlined in the "Handbook", there was extensive use of the nominal

group process. This process centered on small groups identifying count land use issues.

The first phase of the program was to inform local citizens about the CAMA program. The local newspaper, the Daily News, with a circulation of 9,112, gave extensive coverage to the Planning Board's activities. In addition, a number of articles related to CAMA were published. The local television and radio stations also provided coverage of CAMA activities and over 3,000 CAMA leaflets were distributed.

While the informational process was evolving, the Planning Board began making a concerted effort to provide avenues for local citizens to input into the planning process. Basically three different avenues were provided. They were (1) personal interviews, (2) surveys, and (3) workshops and public meetings. An undetermined number of personal interviews were conducted by elected officials, planning board members and members of the Planning Board's Citizen Advisory Council. This face-to-face contact enabled a two-way flow of information about the issues facing Beaufort County.

During the spring of 1975, approximately 3,000 questionnaires were distributed in Beaufort County. These questionnaires asked questions related to local problems, level of local government expenditures and a number of questions regarding development and environmental quality.

In addition to the personal interviews and questionnaires, a number of workshops and public meetings were held throughout the county.

Following these efforts, a day-long goal setting workshop was held. At this workshop, planning board members, elected officials, and members of the Citizen Advisory Council established a comprehensive set of goals for Beaufort County. These goals established the framework for a draft plan that was to be submitted to the CRC by November 23, 1975.

During and after discussion of the November 23 draft, public interest in the plan ignited. A number of goals in the plan, particularly those related to mining, generated a great deal of controversy.

Simultaneous with this rising debate in the county over the goals, the CRC was reviewing the March 23 draft plan. In their review the CRC felt that the plan did not address sufficiently the negative impacts of mining and that the issues facing the county needed to be better defined.

In response to the debates locally and the CRC review, the planning board identified four major land use issues facing the county and scheduled three public hearings to enable the public to express their views on these major land use issues. The issues were 1) mining, 2) growth, 3) water quality and 4) land use regulations.

These public hearings generated a great deal of participation. Public opinion on the issues was often divided. The planning board attempted to develop new goals relating to the major land use issues. These were agreed upon and then staff developed a revised plan using the new goals as the framework for the plan.

The Planning Board held a public hearing on the plan in April and recommended it to the county commissioners. The county commissioners held a public hearing on May 10, 1976 and adopted a land use plan prior to the May 21 CAMA deadline.

To what extent was the public participation process successful? It would appear that the initial attempts to obtain meaningful public participation were a failure. This can be attributed mainly to public apathy. Despite efforts by the planning board to impress upon the public the significance of the CAMA legislation, the public did not feel that it would affect them personally and that there was no great need to become involved.

Meaningful public participation occurred only after preparation of the November 23 draft. Goals set forth in that document were strongly opposed by individuals in the county. They served as targets which could be criticized and debated. The resulting debate enabled interested groups such as the Pamlico-Bath Preservation Foundation to mobilize people to ensure that their opinions were represented.

The final plan does not represent the concensus of opinion on the major issues - for no concensus exists. It does represent what the planning board and county commissioners feel is the most reasonable course of action, a course that will benefit the whole county. Ideally, the issues raised in this plan will continue to be debated and that free and open discussion of the issues by all interested groups will result in decisions which will prove right when our children examine our actions fifty years hence.

IV. CONSTRAINTS ON DEVELOPMENT

A. LAND POTENTIAL

1. Physical Limitations

a. Hazard Areas

Hazard areas can be either man-made or natural. Beaufort County has few man-made hazard areas. Possibly of greatest danger are above ground tanks used for storage of flammable liquids. No large concentration of these exist in Beaufort County. Caution should be exercised in development of sites immediately adjacent to any existing tanks. Future land use regulation should address the problem of storage tanks.

Two types of natural hazard areas exist in Beaufort County, flood hazard areas and shoreline erodible areas. The shoreline of the Pungo and Pamlico River have a high probability of excessive erosion occurring, thereby endangering development in the area.

Large areas of Beaufort County are subject to flooding. The flooding is largely in conjunction with hurricanes or severe winter storms. Beaufort County has taken steps to come under the National Flood Insurance Program. Once mapping has been completed the county will adopt and enforce regulations to control development in flood hazard areas.

b. Soil Limitations

Soil limitations in Beaufort County will determine where, and to what extent future growth can occur. While it is possible, from an engineering point of view, to carry on almost any activity or development in any type of soil, the soils can present problems that, for economic reasons, are impossible to overcome.

The following map examines the soil associations in Beaufort County.

The accompanying legend list on the limitations encountered in each soil association.

c. Water Supply Areas

There is only one water supply area identified by the N. C. Department of Human Resources in Beaufort County. That is the Tranters Creek Watershed which serves the City of Washington as a water source. Since the watershed represents a source of potable water for Washington, any loss or serious detriment to the area would have serious public health implications. Such a loss would also have a significant adverse financial impact.

Uncontrolled development within the watershed would cause significant changes in the runoff patterns and would affect the quantity of water available as a raw water supply. Such development would also adversely affect water quality by introducing a wide variety of pollutants from homes, businesses, or industries, either through discharge or surface runoff into the water supply.

d. Steep Slopes

Steep slopes for the purpose of this plan are defined as areas where the predominant slope exceeds twelve percent. The only areas in Beaufort County which could be defined in this manner are the cliffs and high banks along the south side of the Pamlico River. These cliffs and high banks are constantly threatened by erosion and any development occurring too close to these areas could be threatened.

2. Fragile Areas

Many areas exist in coastal North Carolina which are important economically, environmentally and aesthetically, yet can be easily destroyed by inappropriately or poorly planned development. These areas

in Beaufort County include coastal wetlands, estuarine and public trust waters, areas that sustain remnant species, scenic areas and archaeological and historic sites.

Wetlands, estuarine and public trust waters, areas that sustain remnant species and some historic sites are to be given particular attention as to their constraint on development.

a. Coastal Wetlands

Beaufort County has a number of coastal wetlands (marshes) located along the Pamlico and Pungo Rivers and their tributaries.

This marshland type contributes to the detritus supply necessary to the highly productive estuarine system essential to North Carolina's economically valuable commercial and sports fisheries.

The higher marsh types offer quality wildlife and waterfowl habitat depending on the biological and physical conditions of the marsh. The vegetative diversity in the higher marshes usually supports a greater diversity of wildlife types than the limited habitat of the low tidal marsh. This marshland type also serves as an important deterrent to shoreline erosion especially in those marshes containing heavily rooted species. The dense system of rhizomes and roots of Juncus roemerianus are highly resistant to erosion. In addition, the higher marshes are effective sediment traps.

b. Outer Banks and Dunes

Beaufort County has no outer banks or dunes.

c. Ocean Beaches and Shorelines

Beaufort County has no ocean beaches and shorelines.

d. Estuarine Waters and Public Trust Waters

Estuarine waters are defined in G.S. 116-229(n) (2) as, "all the water of the Atlantic Ocean within the boundary of North Carolina and all the waters of the bays, sounds, rivers, and tributaries thereto seaward of the dividing line between coastal fishing waters and inland fishing waters, as set forth in an agreement adopted by the Wildlife Resources Commission and the Department of Conservation and Development filed with the Secretary of State entitled 'Boundary Lines, North Carolina Commercial Fishing - Inland Fishing Waters, revised March 1, 1965,'" or as it may be subsequently revised by the Legislature.

Public trust areas are defined through the CAMA Planning Guidelines as "All waters of the Atlantic Ocean and the lands thereunder from the mean high water mark to the seaward limit of State jurisdiction; all natural bodies of water subject to measurable lunar tides and lands thereunder to the mean high water mark; all navigable natural bodies of water and lands thereunder to the mean or ordinary high water mark as the case may be, except privately owned lakes having no public access; all waters in artificially created bodies of water in which exists significant public fishing resources or other public resources, which are accessible to the public by navigation from bodies of water in which the public has rights of navigation; all waters in artificially created bodies of water in which the public has acquired rights by prescription, custom, usage, dedication or any other means. In determining whether the public has acquired rights in artificially created bodies of water, the following factors shall be considered: (1) the use of the body of water by the public; (ii) the length of time the public has used the area; (iii) the value of public resources in the

body of water; (iv) whether the public resources in the body of water are mobile to the extent that they can move into natural bodies of water; (v) whether the creation of the artificial body of water required permission from the State; and (vi) the value of the body of water to the public for navigation from one public area to another public area.

While estuarine waters and public trust areas are treated separately in the State Guidelines, they will be considered as one for the purpose of this plan. The distinction drawn between them in the guidelines is an artificial one and has no basis other than as a political division between the commercial and sport fisheries interest. The significance of both areas is identical as are the appropriate land uses.

The estuarines of any river system are among the most productive natural environments of North Carolina. They not only support valuable commercial and sports fisheries, but are also utilized for commercial navigation, recreation and aesthetic purposes. The high level of commercial and sports fisheries and the aesthetic appeal of coastal North Carolina is dependent upon the protection and sustained quality of our estuarine and river systems.

e. Complex Natural Areas

Complex natural areas are defined as areas that have remained essentially unchanged by human activity. The Planning Board does not identify any areas in Beaufort County as complex natural areas.

f. Areas Sustaining Remnant Species

Both the American alligator and the red-cockaded woodpecker are listed as endangered species in North Carolina, and both have recently recorded occurrence in Beaufort County. No recent sightings of the

bald eagle or the peregrine falcon are known. The Atlantic sturgeon, which is considered to be rare, and the short-nosed sturgeon which is classed as endangered possibly occur in the Pamlico River.

g. Areas Containing Unique Geological Formations

Beaufort County has no areas containing unique geological formation.

h. Registered Natural Landmarks

Beaufort County has no registered natural landmarks.

i. Archaeological and Historic Sites

Forty-eight archaeological or historic sites have been identified in Beaufort County. Six of these are registered on the National Register of Historic Places and as such will be considered as areas of environmental concern. The remaining 42 sites possibly have as much local significance as those listed on the National Register. The County should encourage that these historic sites be retained and that adjacent development be compatible with the sites. Map 5 locates the historic sites which are listed on Table 13.

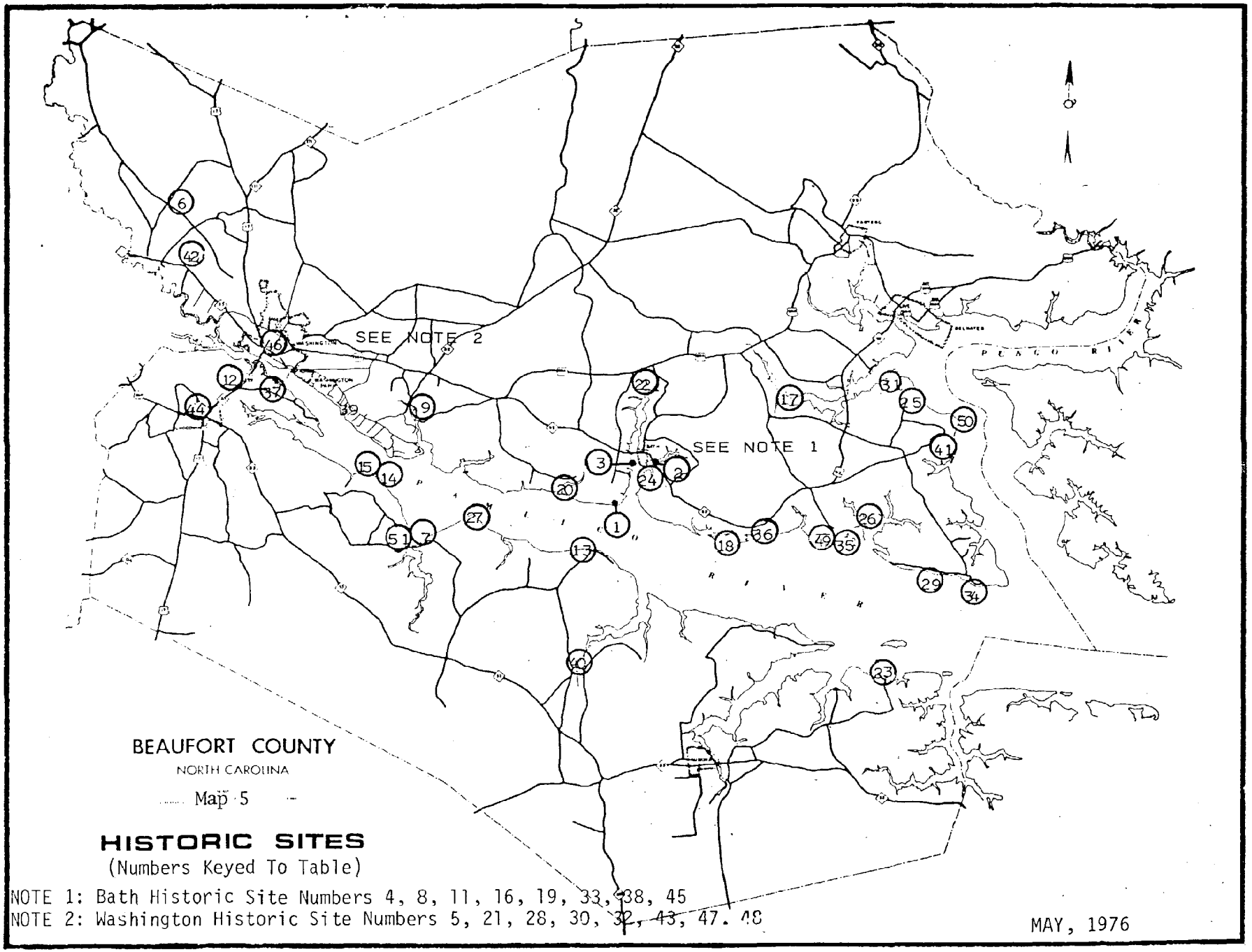

SEE NOTE 2
SEE NOTE 1
PEAGO RIVER
BEAUFORT COUNTY
NORTH CAROLINA
Map 5
HISTORIC SITES
(Numbers Keyed To Table)
NOTE 1: Bath Historic Site Numbers 4, 8, 11, 16, 19, 33, 38, 45
NOTE 2: Washington Historic Site Numbers 5, 21, 28, 30, 32, 43, 47, 48
MAY, 1976

Table 13 INVENTORY OF HISTORIC AREAS BEAUFORT COUNTY

Map No. or Letter	Name	Type of Area	Location	Description	Present Use
1	Archbell Point Site	Historic (Aboriginal)	Bath	Location of Seca on John White's map	Texasgulf, Inc. Horse Farm (private)
2	Back Creek Site	Pre-historic (Aboriginal)	Bath	Midden layer has been located	Private farm
3	Bath Creek Site	Pre-historic (Aboriginal)	Bath	Sherds and flint fragments have been located	Private farm
4	Bath Historic District (Entered in National Register of Historic Places	Historic (Commercial-Political)	Bath	In 1705 Bath became the first incorporated town in N. C. Cary's Rebellion (1708-1711) took place in the vicinity. In 1744 and 1752, Colonial Assembly met here; and three colonial governors made their homes in Bath. The town contains St. Thomas Church (ca. 1734), the oldest church building in the state. Other old homes include the Palmer-Marsh House (ca.1750) and the Van Der Veer House (ca.1790).	Town

Table 13 (Continued) INVENTORY OF HISTORIC AREAS BEAUFORT COUNTY

Map No. or Letter	Name	Type of Area	Location	Description	Present Use
5	Beaufort County Courthouse (Entered in National Register of Historic Places)	Historic (Architectural)	Washington	Constructed in 1786 when the county seat was moved from Bath to Washington, this courthouse has been continuously used for its original purpose. Present structure built in 1913 in Neo-Classical style.	Courthouse
6	Blounts Creek Site	Pre-Historic (Aboriginal)	Chocowinity	Potsherds found together with a shallow humus	Private homes
7	Bonner House (Entered in National Register of Historic Places)	Historic (Architectural)	Bath	Ca.1835, two-story frame house with exterior and interior chimneys, one-story veranda, and a number of outbuildings. Lots originally owned by John Lawson. Part of Lawson House foundation still present.	Restored by Historic Bath Commission & Oscar Smith Foundation
8	Broad Creek Site	Pre-Historic (Aboriginal)	Long Acre	Shreds have been located	Salvation Army Camp Site
9	Buzzard Hotel	Historic (Commercial)	Bath	Circa 1850-1860. Operated as an ordinary inn.	Private residence
10	Carrow House	Historic (Architectural)	Bath	Late 18th Century. One-story frame house with a shed porch.	Private home

Table 13 (Continued) INVENTORY OF HISTORIC AREAS BEAUFORT COUNTY

Map No. or Letter	Name	Type of Area	Location	Description	Present Use
11	Chocowinity Site	Pre-Historic (Aboriginal)	Chocowinity	Site of an Indian village or dwelling area	Private
12	Core Point Site	Historic (Aboriginal)	Richland	John Lawson, first Survey-General of North Carolina, located the Core Indians at this site.	Private homes and summer homes
13	Fort Hill Site	Historic	Chocowinity	Circa 1860. Site of Confederate batteries on Pamlico River used in siege of Washington, North Carolina, in 1863.	Private homes
14	Fort Hill Site	Pre-Historic (Aboriginal)	Chocowinity	Site of an Indian village	Private homes
15	Glebe House	Historic (Architectural, Religious)	Bath	1762, two-story frame house with fanlights in the gable ends. Built to serve as the rectory for St. Thomas Episcopal Church.	Rectory
16	Graveyard Point Site	Pre-Historic (Aboriginal)	Pantego	Site of an Indian village	Private farm
17	Gum Point Site	Pre-Historic (Aboriginal)	Bath	Aboriginal materials found	Private farm

Table 13 (Continued) INVENTORY OF HISTORIC AREAS BEAUFORT COUNTY

Map No. or Letter	Name	Type of Area	Location	Description	Present Use
18	Handy's Point Site	Historic (Aboriginal)	Bath	Site of Secoitan village	Private homes
19	Hassell Site	Pre-Historic (Aboriginal)	Bath	Sherds have been located	Private farm
20	Haven Warehouse and Fowle Warehouse	Historic (Commercial-Military)	Washington	Ca.1776. One of the four original warehouses built in Washington to handle the West Indies trade. Used as a quartermaster depot and Confederate and Union prisons during the Civil War	Private storage area
21	Hunter's Bridge Site	Pre-Historic (Aboriginal)	Bath	Evidence of Indian village	Private farm
22	Jarvis Site	Pre-Historic (Aboriginal)	Richland	A small midden has been located	Private homes
23	Kirby Grange Site	Historic (Political)	Bath	Early 18th Century. Home of Christopher Gale, first Chief Justice of North Carolina	Private home and farm
24	Lawson Shore Site	Pre-Historic (Aboriginal)	Bath	Midden materials have been found	Private farm

Table 13 (Continued) INVENTORY OF HISTORIC AREAS BEAUFORT COUNTY

Map No. or Letter	Name	Type of Area	Location	Description	Present Use
25	McGowan Site	Pre-Historic (Aboriginal)	Bath	Sherds have been located	Private farm
26	Maul's Point Site	Pre-Historic (Aboriginal)	Chocowinity	Possible site of an Indian village	Private farm and summer homes
27	Mayo Law Office	Historic (Political)	Washington	No known date	Law office
28	Moore's Beach Site	Pre-Historic (Aboriginal)	Bath	Midden, marked by black humus and shell lenses, has been located	Summer homes and private beach
29	Myers House	Historic (Architectural)	Washington	Ca.1814. Two-story frame townhouse on a brick foundation. Myers and Telfair Houses are the two oldest houses extant in Washington	Private residence
30	Norfleet Site	Historic (Aboriginal)	Bath	Possible site of Asquatock village	Private farm

Table 13 (Continued) INVENTORY OF HISTORIC AREAS BEAUFORT COUNTY

Map No. or Letter	Name	Type of Area	Location	Description	Present Use
31	N.C. National Bank, West End Branch (Formerly known as Bank of Washington, West End Branch) Entered in National Register of Historic Places.	Historic (Architectural-Commercial)	Washington	Constructed in 1854, this fine example of Classic design is one of the few remaining small buildings in North Carolina built in the temple-form idiom	Bank
32	Palmer-Marsh House. National Historic Landmark, entered in National Register of Historic Places	Historic (Architectural-Commercial)	Bath	Built about 1750, the house is an excellent example of a two-story townhouse design for both business and residential use. The east end is dominated by two great English bond chimneys united by a two-story brick pent-roofed closet. House once served as a chandlery.	Restored and furnished by Historic Commission. Home maintained as a Historic Site, N.C. Dept. of Archives and History
33	Pamlico Beach Site	Pre-Historic (Aboriginal)	Bath	Shell midden located	Private summer homes and beach
34	Pine Crest Site	Pre-Historic (Aboriginal)	Bath	Midden located	Private homes

Table 13 (Continued) INVENTORY OF HISTORIC AREAS BEAUFORT COUNTY

Map No. or Letter	Name	Type of Area	Location	Description	Present Use
35	Rest Haven Site	Pre-Historic (Aboriginal)	Bath	Midden located	Private summer homes
36	Rodman Creek Site	Pre-Historic (Aboriginal)	Washington	Sherds and shells located	Private land, woodland
37	St. Thomas Episcopal Church (Entered in National Register of Historic Places)	Historic (Religious)	Bath	1734-1740. St. Thomas Parish was organized in 1701, and services were being held in St. Thomas Church by 1739, making it the oldest building still standing in North Carolina. It has been the scene of religious services for over 230 years. Originally, Church of England.	Worship
38	Service Camp Site	Pre-Historic (Aboriginal)	Long Acre	Sherds located	Summer camp for retarded children
39	Shell Landing Site	Pre-Historic (Aboriginal)	Richland	Possible site of a village	Private farm
40	Sparrow's Point Site	Pre-Historic (Aboriginal)	Bath	Site of a large Indian village	Private farm

Table 13 (Continued) INVENTORY OF HISTORIC AREAS BEAUFORT COUNTY

Map No. or Letter	Name	Type of Area	Location	Description	Present Use
41	Telfair House	Historic (Architectural)	Washington	Circa 1818. Two-story frame townhouse on a brick foundation. Telfair and Myer Houses are the two oldest houses extant in Washington	Private residence
42	Trinity Chapel	Historic (Religious)	Chocowinity	Originally built in 1773 on a site on the east side of the Washington-Greenville hwy. (U.S. 264) near present Chapel Branch. Chapel was moved to present site in early 20th Century because of constant vandalism.	Worship
43	Van Der Veer House	Historic	Bath	Originally located on property granted to Thomas Sparrow by the Bath Town Commissioners in 1706. The gamble-roofed house changed hands several times before it was bought by Jacob Van Der Veer in 1824	Being restored by Bath Historic Commission
44	Washington Waterfront	Historic (Commercial)	Washington	19th Century large group of commercial buildings which reflect port activity	Commerce

Table 13 (Continued) INVENTORY OF HISTORIC AREAS BEAUFORT COUNTY

Map No. or Letter	Name	Type of Area	Location	Description	Present Use
45	Whalen Site	Pre-Historic (Aboriginal)	Bath	Possible Indian village site	Private farm
46	Woodlawn	Historic	Washington	Early 18th Century. Originally faced Hackney Ave. Later moved to West Main St. and remodeled	Private residence
47	Woodstock, Townsite of	Historic (Commercial-Political)	Bath	Incorporated in 1738. The remains of the town of Woodstock	Private farm
48	Wooland Site	Pre-Historic (Aboriginal)	Chocowinity	Site of a large Indian village area	Private farm

3. Areas with Resource Potential

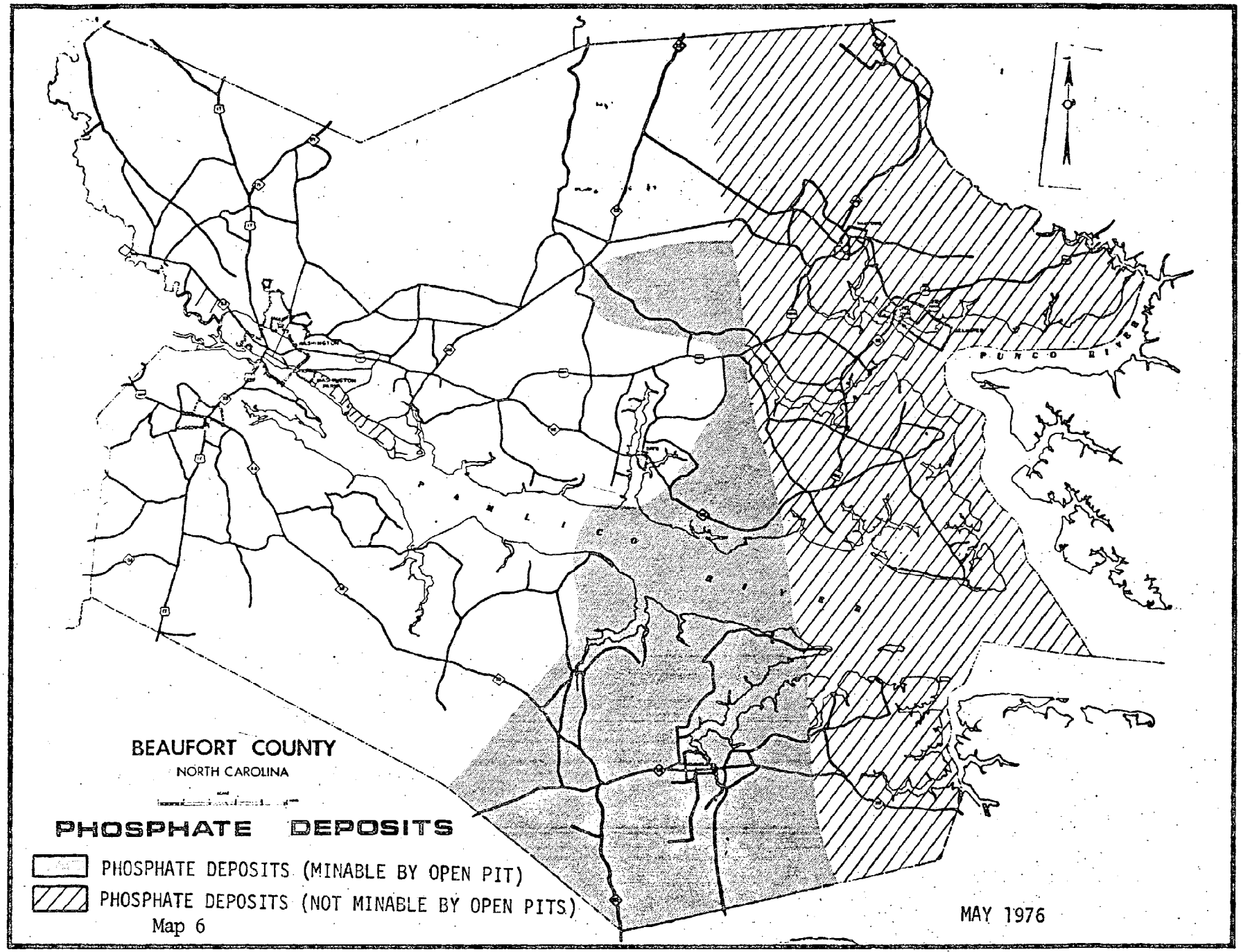
The County has large acreages of prime agricultural land, forest land (much of which is publically owned), park and wildlife land, and areas underlain with phosphate minerals. All of these resources should be used for their most desirable purpose, for productivity and economic gain, or for conservation and recreation.

a. Agricultural Lands

The highly organic soils and much of the mineral soils are highly productive when drained and managed correctly. Much of the forest land is cropped on well organized bases yielding high quality pulp and saw timber. The cleared and drained areas are some of the state's most productive grain, fodder, potatoes, and tobacco lands. For the purpose of identifying the prime agricultural lands, more detailed soils maps are needed for re-evaluation of the forest lands whereby taxes will be levied on the potential of the land to grow timber.

b. Mineral Resources

Much of the county is underlain by phosphate bearing sediments and some heavy minerals. The limits of the phosphate sediments are well-known and are found to be feather edged at about Blounts Bay on N-S strike and extend continuously beneath land and rivers on a gently dipping and thickening trend eastward to some unknown distance beneath or beyond Pamlico County (see Map 6). The phosphate content of the sediments vary widely in thickness and in grade. The total tonnage of phosphate bearing material is estimated in several billions of tons. However, the material that is deemed recoverable by current technology as ore (material that can be extracted and processed profitably) is


PUNCO RIVER
BEAUFORT COUNTY
NORTH CAROLINA
PHOSPHATE DEPOSITS
PHOSPHATE DEPOSITS (MINABLE BY OPEN PIT)
PHOSPHATE DEPOSITS (NOT MINABLE BY OPEN PITS)
MAY 1976

Map 6

estimated at over 1 billion tons. With changes in the fertilizer values and technological developments, these ore tonnages can vary greatly. With the rapid depletion of the Florida phosphate reserves, it is expected that much of the thinner and lower grade sections and deeper buried material will be feasibly classified as ore in the not too distant future, thus, it is not cognizant to establish fixed boundaries to this ore deposit for the purpose of extraction.

Large tracts of potentially recoverable phosphate reserves are owned by Texasgulf, North Carolina Phosphate, FMC, and Weyerhaeuser. Also, 10,000 acres of state owned land in the Pamlico estuary are under lease for potential extraction. Open case mining is currently being employed to recover thick high grade ore in the Lee Creek area. Expansions of operating plants and other developments are underway. Hydraulic mining thru bore holes has been tested and plans to develop some deeper high grade ores in the Pungo River-Pamlico River peninsula area are underway.

Mining and reclamation regulations involved with ore extraction are under the auspices of the Department of Natural and Economic Resources of North Carolina as set out in the Mining Act of 1971. The agency is amply staffed with competent professionals to regulate the operations.

c. Publicly - Owned Lands and Other Non-Intensive Outdoor Recreation Lands

Goose Creek State Park is being developed along Upper Goose Creek in Long Acre Township. The site is intended to provide: (1) an area of unique value; (2) recreational use of natural resources; (3) portrayal and interpretation of plant and animal life and natural features; and (4) preservation of a natural area of state importance.

d. Privately-Owned Wildlife Sanctuaries

The only privately-owned wildlife sanctuaries in Beaufort County are those lands contained in the Goose Creek Wildlife Refuge that border on Lower Goose Creek.

B. CAPACITY OF COMMUNITY FACILITIES

1. Identification, Design Capacity and Utilization of Existing Water and Sewer Service

Town of Washington Park

The Town of Washington Park abuts the southeastern municipal limits of the City of Washington. The residents rely on individual wells for water. The proximity of individual septic tanks and shallow wells increases the chances of utilizing contaminated water.

Town of Chocowinity

The Chocowinity water system is supplied by one deep well, capable of producing 150 gallons per minute. A 75,000 gallon elevated storage tank supplies a distribution system of eight and six inch mains. The town is presently in need of an additional well and additional storage.

Town of Bath

The Town of Bath, in conjunction with the Farmers Home Administration, recently started construction of a central water system. The system will consist of two deep wells treatment facilities, 50,000 gallons of elevated storage, and a distribution system consisting of six, four, three, and two inch mains.

Town of Pantego

The Town of Pantego presently does not have a municipal water system. A study was made to determine the feasibility of installing a small groundwater system for the town, but to date funding has not been acquired.

The cities of Washington, Belhaven, and Aurora have water and sewer services. For a complete discussion of those systems, see the individual town plans.

2. Identification, Design Capacity and Utilization of Existing Schools

Education

There are two public school systems serving the primary and secondary educational needs of Beaufort County. These are the Washington City Schools, which serve all of Washington Township and the portion of Long Acre Township west of Broad Creek, and the Beaufort County Board of Education, which serves all of the county outside the Washington City School district.

The Washington City Schools operate five schools within their system. All of the schools are located in the City of Washington. A brief description of each school follows.

a. Eastern Elementary School is located on the corner of Highway 264 and Hudnell Street. The original building was built in 1966. Classrooms were added in 1969 and 1975. The condition of the present facility is good. A new roof will be added in the near future. The present facility is filled in excess of capacity with 946 pupils. There are 38 teachers assigned to this school. Kindergarten, first and second grades are housed in this facility.

b. John C. Tayloe School is located on Tarboro Street extension. The original building was built in 1960. Additions were made in 1964, 1970 and 1975. The condition of this building is good. The present facility is filled to capacity with 551 third and fourth grade pupils. There are 29 teachers assigned to this school.

c. John H. Small School is located on Fourth Street between Harvey and Bonner Streets. It was built in 1922. An addition was made in 1958. The condition of this facility is poor. The building and grounds are inadequate. It is presently filled with 611 fifth and sixth graders. Additional classroom space will probably come from renovation of the auditorium. Plans have not been made, but this building will have to be replaced in the not too distant future. Twenty-nine teachers are assigned to this school.

d. P. S. Jones Junior High School is located on Seventh and Ninth Streets between Pierce and Bridge Streets. The original building was constructed in 1922. This portion of the building was renovated after a fire in the 1950's. Primary rooms were added on this site in 1950. A cafeteria was added in 1951. The present ninth grade building was completed in 1952. Other additions were made in 1964 and 1965. The gymnasium was completed in 1970. The condition of this facility varies from very poor to good. The original building (two-story section and auditorium) should be replaced. Plans have not been completed for replacement at this time. The present facility is not crowded. There are presently 1,109 seventh, eighth, and ninth grade pupils in this school. There is room for some growth. Projections do not

indicate any large increase in the near future. There are 46 teachers assigned to this school. Plans to renovate and to expand the present library are in the making.

e. Washington High School is located on Eighth and Harvey Streets. The original building was completed in 1952. The auditorium was completed in 1955. Eight classrooms were added in 1965. "Nissen huts" are used for agriculture and carpentry shops. The condition of the facility is fair. There are now 884 tenth, eleventh, and twelfth graders. The present facility could accommodate about 950 students. Plans are presently being formulated for the construction of a Vocational Education Building and for the expansion of the library. There are 48 teachers assigned to this school.

A special $.08 tax is levied in the Washington school district. This, combined with local, state and federal sources, allows the system an expenditure of $835 per pupil for the 1973-74 school year. This is $61.18 higher per pupil expenditure than the county school system.

An average of 55 percent of the 1970 graduates from the Washington City school system have continued their education after graduation.

The Beaufort County Board of Education operates ten schools throughout the county. A brief description of the schools follows.

a. Aurora High School, Aurora, was constructed in 1928 with additions in 1954, 1966, and 1972. The Board of Education has determined that the school is in need of replacement. The present facilities can handle 600 students with 460 presently attending. Twenty-two teachers are assigned to the school.

b. Bath High School, Bath, was constructed in 1920 with additions in 1938, 1943, 1948, 1953, 1967, 1972, 1974 and 1975. The Board of Education has determined that this building needs replacing. The present facilities are capable of handling 850 students with 718 presently attending. Thirty-four teachers are presently assigned to the school, teaching grades kindergarten through 12.

c. Beaufort County Elementary School, Pantego, was constructed in 1923 with additions in 1956, 1974, and 1975. The condition is rated as good. The present facilities are capable of handling 600 students with 309 students presently attending.

d. Belhaven Elementary School, Belhaven, was constructed in 1950 with additions in 1953, 1974 and 1975. The condition of the buildings is rated as good. The present facilities are capable of handling 600 students with 490 presently attending. There are 23 teachers assigned to the school.

e. Chocowinity Primary School, Chocowinity, was constructed in 1952 with additions in 1974 and 1975. Condition of the buildings is rated good to new. The facilities are designed to handle 360 students with 204 presently attending. Nine teachers are assigned to the school.

f. Chocowinity High School, Chocowinity, was constructed in 1937 with additions in 1949, 1952, 1964 and 1967. The condition of the building is rated as good. The facility is designed for 900 students with 838 students presently attending. Thirty-five teachers are assigned to the school.

g. John A. Wilkinson High School, Belhaven, was constructed in 1938 with additions in 1951, 1953, 1961, 1965 and 1968. Condition of the facilities is rated as fair to good. The facility is designed to handle 700 students with 475 presently attending. Twenty-four teachers are presently assigned to the school.

h. Pantego High School, Pantego, was constructed in 1924 with additions in 1939, 1952, 1963, 1972, 1974 and 1975. The Board of Education has determined that the facility needs replacing. The facility is capable of handling 540 students with 264 presently attending. Sixteen teachers are presently assigned to the school.

i. Pinetown Elementary School, Pinetown, was constructed in 1937 and 1950. The condition of the facility is rated as good. It is capable of handling 240 students with 183 presently attending. Nine teachers are assigned to the school.

j. S. W. Snowden Elementary School, Aurora, was built in 1938 with additions in 1955, 1964 and 1966. The condition of the facility is rated as good. The facility can handle 720 students with 611 presently attending. Twenty-eight teachers are presently assigned to the school.

The expenditure per student in the Beaufort County school system is $773.82.

In addition to the above public educational institutions, primary and secondary education is provided by three private institutions, Pamlico Community School in Washington Park, the Pungo Christian Academy in Belhaven and Terra Ceia Christian School in Pantego.

Post-secondary education is offered by Beaufort Technical Institute. The present facilities at the technical institute are overcrowded. A bond referendum to construct additional facilities was held during the spring of 1975 but was defeated.

3. Identification, Design Capacity and Utilization of Primary Roads

Beaufort County's primary roads consist of U.S. 17, running north-south in the western portion of the county; U.S. 264, running east-west on the north side of the Pamlico River from Hyde County to Pitt County; N.C. 33, running east-west on the south side of the Pamlico River; N.C. 306, running from N.C. 33 west of Aurora, south; N.C. 92 running from 264 to Bath and rejoining U.S. 264 at Belhaven; N.C. 32, running north from U.S. 264 to Plymouth; and N.C. 99 running from Pantego to N.C. 32.

In order to determine capacity, the peak 24 hour traffic flow is compared to design capacity. Those peak traffic counts are only for areas in county jurisdiction.

Table 14 examines percentage utilizations.

TABLE 14

Utilization of Primary Roads
Beaufort County, 1974

Road	Design Capacity	Max. 24 hr. County	Percent Utilization
U.S. 17	10,920	6,900	63.2%
U.S. 264	10,920	7,400	67.8%
N.C. 32	10,920	1,600	14.6%
N.C. 33	10,920	4,000	36.6%
N.C. 99	7,200	1,400	19.4%
N.C. 92	7,200	1,500	20.8%

V. ESTIMATED DEMAND

A. POPULATION & ECONOMY

1. Population

Accurately estimating future population figures is recognized as an almost impossible task, yet it is recognized that it is essential to attempt such estimates in order to plan for future development. Providing services, such as schools, water and sewer require that local government make some estimate of the demand that might be placed on these services.

The population projections used in this study were prepared by Freeman and Associates in their study, Region Q Water Management Plan. These projections show Beaufort County gaining population. These projections seem most reasonable in light of (1) the anticipated expansion of phosphate mining in the county, and (2) an estimated population of 37,000 on July 1, 1974 by the U. S. Department of Commerce. The following figure charts the projected populations to the year 2020.

Table 15 breaks the population projection for 1970-2000 down by townships. These township projections were prepared by the North Carolina Department of Natural and Economic Resources. Table 16 gives the projected municipal populations for 1970-2020.

Beaufort County is projected to increase population by 1,460 from 1975 to 1985.

The above population projections are consistent with the desires of the citizens of Beaufort County. The people of the county desired a moderate pattern of growth, which is reflected in the population projections.

The capability of the land and water to sustain the above projected population is largely defined by the means used to dispose of sewage. Beaufort County

has an abundant supply of ground water and water supply provides no constraints to growth.

If the projected population is accommodated in dwellings utilizing septic tanks, it is conceivable that the projected population could exceed the capacity of the land and water to sustain it. In the coastal area the detrimental effects of sewage disposal on ground and surface water resources represent an important example of physical limitations of development. After the density is reached which the land can effectively assimilate in its natural state, then any increased development results in a diminution of the quality of ground and surface waters. Up to a certain point, which varies depending on the species, this diminution in water quality can be tolerated by marine organisms which dwell in the surface waters. Also, up to a certain point, the diminution in surface and ground waters can be tolerated by humans. However, after one of these threshold "toleration" points is reached, the waters become unusable or unacceptable for use by marine organisms and humans. Beyond such a threshold a different order of public investment is needed to prevent degradation. Thus upon approaching these thresholds, and there are no easily determinable indices by which these thresholds can be established, certain planning decisions need to be made. Basically these decisions involve determining whether to limit further increases in density, to put money and energy into the system to provide alternative methods of waste disposal, or to tolerate the diminution in water quality as an acceptable "cost" of further development. If neither one of the first two choices is made, then the third alternative is chosen by default. It is clear that at some point density must be regulated or water quality will diminish. It is not possible to choose both alternatives without expending money and energy on alternative solutions to the problem.

FIGURE 1 PROJECTED POPULATION

BEAUFORT COUNTY

1970-2020

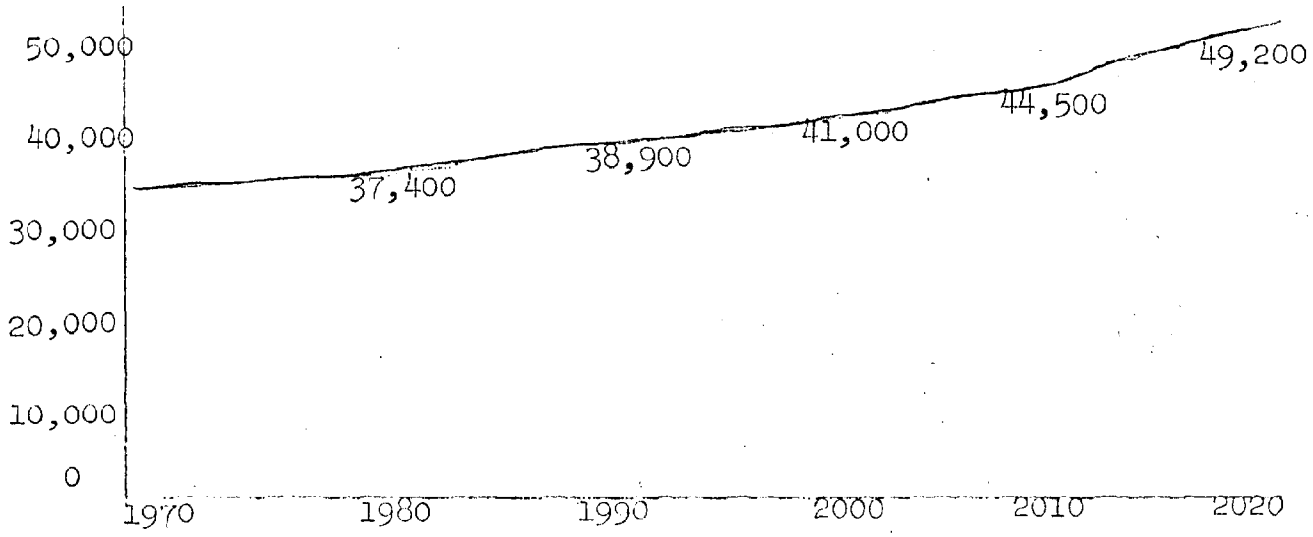


TABLE 15 PROJECTED TOWNSHIP POPULATION

Beaufort County

1970-2000

	1970	1980	1990	2000
Beaufort County	35,980	37,400	38,900	41,000
Bath Township	3,237	2,993	2,837	2,712
Chocowinity Township	4,661	4,854	5,050	5,300
Long Acre Township	6,976	7,686	8,930	10,457
Pantego Township	5,126	5,043	4,958	4,916
Richland Township	3,626	3,185	2,966	2,786
Washington Township	12,354	13,637	14,159	14,829

TABLE 16 PROJECTED POPULATION

Municipalities of Beaufort County

1970-2020

	1970	1980	1990	2000	2010	2020
Beaufort County	35,980	37,400	38,900	41,000	44,500	49,200
Aurora	620	726	850	995	1,190	1,380
Bath	231	135	83	51	32	20
Belhaven	2,259	2,134	2,113	2,031		
Chocowinity	566	532	509	490	475	462
Pantego	218	172	139	114	94	77
Washington	8,961	9,528	9,947	10,117	11,125	12,300
Washington Park	517	356	268	204	156	120

SOURCE: Region Q Water Resource Management, 1975, except for Aurora and Belhaven which were prepared by the town planners.

Since it is unknown at what density and where the projected population will be accommodated and to what extent means other than septic tanks will be used for sewage disposal, it is impossible to determine the exact capacity of the land and water to sustain population growth. During the implementation of this plan, it will be necessary to constantly monitor the impact of new development on the land and water.

Seasonal population has not traditionally played a major role in Beaufort County. It is anticipated that the amount of seasonal population will increase in the future, drawn to the amenities offered here. The major impacts this will have locally are 1) an increase in service related activities and 2) increased demands made on selected local governmental services such as solid waste disposal.

2. Economy

In order to make decisions for the future, it is necessary to understand forces at work in our national economy which will influence Beaufort County. What follows is a look at these forces.

There recently has emerged a national recognition that resources are limited. The impact of this is just making itself felt on the national economy. The resulting competition for limited resources will have a largely positive impact on Beaufort County.

The local economy is dependent to a large extent on resource extraction. Forestry, agriculture and mining provide resources for which there is increasing competition. The planned expansion of phosphate mining was triggered by an increased demand for fertilizer to aid in the production of world food suppliers. In addition, other major deposits of phosphate in the U. S. are being depleted, giving added importance to Beaufort County.

The long range prospect for the county's resource extraction businesses, such as forestry, agriculture and mining is good. Beaufort County remains rich in natural resources which will bring an increasingly higher price in the market place.

Agriculture has played a dominant role in Beaufort County, but that role is changing. With changes in agricultural practices, mainly mechanization, the number of workers needed in agriculture has been reduced. There are indications that the impact of mechanization has leveled off. In the future there should be fewer jobs lost to mechanization, but it is likely that the remaining jobs will demand a higher level of training and skills.

The major negative impact from the increased competition for natural resources will be in the area of higher energy cost, particularly gasoline. Most workers not employed in agriculture are dependent upon the private automobile to transport them from place of residence to place of work. Many workers commute to work as much as 30 miles one way each day. These workers will come under increasing pressure to locate closer to where they work or find an alternate means of transportation.

An additional negative impact will result from the increased competition for natural resources. As this competition increases, agricultural and forestry land will be displaced by urban uses, mining and recreational development. The county will have to take steps to ensure that prime agricultural land is not displaced by competing land uses.

B. FUTURE LAND NEEDS

The North Carolina Coastal Area Management Act Guidelines direct that a gross ten year estimate of land needs be allocated to the appropriate land classes. In doing this, the estimated population growth is allocated to the

Transition, Community and Rural classes of the Land Classification System. This system is explained in detail in Part Three of this plan.

Beaufort County's projected population increase from 1975 to 1985 is 1,460. Some of this population will locate in rural areas, but the majority will locate in the areas classed Community, especially the area east of Washington. The only areas likely to be transitional are those immediately adjacent to Washington. The City of Washington plans to annex adjacent areas in the future. These are classed Transitional.

C. COMMUNITY FACILITIES DEMAND

1. Ten-Year Population Increase

As discussed in the previous section, Beaufort County's population is expected to increase by 1,460 between 1975 and 1985. Most of this increase is expected to be absorbed in the area east of Washington.

2. Services Needed to Accommodate Projected Population

What type of services will be required to accommodate the projected population increase? What will they cost? Of the major services discussed previously (water and sewer, school and roads), the school system will be the most severely affected. The facilities of the Washington City School System are already overloaded in some cases. The majority of the population increase is anticipated to locate in the area served by the Washington City Schools. This will further tax this system and necessitate constructing additional facilities. The Washington Chamber of Commerce has recently completed a study of all the schools in Beaufort County and estimates that a total of $12 million of improvements are needed.

Two '201' studies are being conducted in Beaufort County at this time. These studies will evaluate the wastewater treatment needs of the two study areas. While this study is not complete, it is anticipated that a need will be demonstrated to extend sewer service outside to Washington to Washington Park, Chocowinity and certain growth areas east of Washington. If these facilities are provided, then the expected population increase in the area could be accommodated utilizing federal money from the '201' Program.

The other '201' study area is Belhaven-Panteo and surrounding area. It is anticipated that the study will recommend that the Belhaven sewage treatment plant be upgraded to accommodate seasonal demands.

Upgrading of this system should accommodate any anticipated increases in population.

Due to the ease with which potable water is obtainable in Beaufort County, it is not anticipated that water supply will become a factor in accommodating population increases.

The present road systems are capable of accommodating anticipated population increase.

3. Ability of Local Economy to Finance Service Extension

A local government's ability to provide services to its citizens is limited by the amount of revenues it can raise. Local governments in North Carolina depend basically on four sources of revenue. An important share comes from grants from the State and Federal government. While these are important sources of revenue, local government has limited control over how much money they will receive and how it will be spent.

A second source of funding is local property taxation. Beaufort County has a higher per capita appraised value of taxable property than the state average.

This reflects the high capital investment involved in mining operation. Expansion of mining in Beaufort County will mean an even higher per capita value for taxable property. The county presently has the lowest effective tax rate in Region Q. Increased capital investment in the county will allow county government to either lower taxes or raise the level of services offered.

A relatively new source of income for local governments in North Carolina is the local sales tax. The county's per capita retail sales of $2,033 is higher than Region Q's and near the state level. This relatively high level of retail sales makes the local sales tax an important source of revenue for county government.

Other revenues are collected from miscellaneous sources such as ABC revenues, licenses and fees. Table 17 looks at county and municipal tax and debt data.

TABLE 17

COUNTY AND MUNICIPAL REVENUE AND DEBT DATA[1/]

Beaufort County

Local Government	Appraised Value	Per Capita Appraised Value	Total All Revenues	Tax Rate	Bonds Outstanding	Per Capita Debt
Beaufort County	$349,697,283	$ 9,719.21	$2,913,509.00	$.62	$3,220,000	$ 89.20
Aurora	3,833,361	6,182.84	96,060.31	.62	177,500[2/]	286.29
Bath	1,023,923	4,432.57	8,441.27	.32	70,000	304.35
Belhaven	10,197,656	4,514.23	763,292.50	.52	503,000	221.58
Chocowinity	6,541,812	11,510.27	39,587.15	.30	140,600	246.67
Pantego	1,294,035	5,935.94	17,295.94	.32	-0-	-0-
Washington	63,461,819	7,082.00	5,403,313.02	.68	1,672,000	185.98
Washington Park	4,573,158	8,845.57	34,029.46	.45	-0-	-0-

[1/] County data is for 1975-75. Municipal data is for 1973-74.

[2/] Bond anticipation rates.

SOURCE: North Carolina Local Government Commission and local governments. Computation by North Carolina Department of Natural and Economic Resources.

VI. PLAN DESCRIPTION

The Land Classification map which is included in this document depicts a desirable future land use pattern for Beaufort County consistent with the goals outlined in this plan. The map represents a generalized overview of desirable land development patterns over the next ten years and should be used as an aide to decision making regarding location of public facilities, economic development activities, adoption of land use regulations and other decisions which affect development activities in the county.

Conceptually, the map depicts the area around Washington as being the major developed area in the county. The eastern portion of the county is depicted as a resource extraction area with the principal activities being agriculture, forestry, and mining. The incorporated areas of Aurora, Bath, Belhaven and Pantego would serve as service centers for the resource extraction area.

The land classification map depicts the above by classifying all of the land in the county into six classes of which five are part of the North Carolina Land Classification System and a sixth class, Secondary Transition has been added to meet development needs in Beaufort County.

As a statement of local policy consistent with statewide needs and goals, the county land classification map will serve as a basic tool for coordinating numerous policies, standards, regulations and other governmental activities at the local, State and Federal level.

The system also provides a guide for public investment in land. For example, State and local governments can anticipate the need for early acquisition of lands and easements in the Transition class for schools, recreation, transportation and other public facilities.

The system can also provide a useful framework for budgeting and planning for the construction of community facilities such as water and sewer systems, schools and roads. The resources of many state and federal agencies, as well as those of the local government which are used for such facilities, can then be more efficiently allocated.

In addition, such a system will aid in better coordination of regulatory policies and decisions. Conservation and rural production lands will help to focus the attention of state and local agencies and interests concerned with the valuable natural resources of the state. On the other hand, lands in the Transition and Community classes will be of special concern to those agencies and interests who work for high quality development through local land use controls such as zoning and subdivision regulations.

Finally, the system can help to provide guidance for a more equitable distribution of the land tax burden. Private lands which are in the Rural and Conservation classes should have low taxes to reflect the policy that few, if any, public services will be provided to these lands. In contrast, lands in the Transition and Secondary Transition classes should be taxed to pay for the large cost of new public services which will be required to support the density of growth anticipated.

THE SIX CLASSES

DEVELOPED

Purpose: The Developed Class identifies developed lands which are presently provided with essential public services. Consequently, it is distinguished from areas where significant growth and/or new service requirements will occur. Continued development and redevelopment should be encouraged to provide for the orderly growth in the area.

Description: Developed lands are areas within a minimum gross population density of 2,000 people per square mile. At a minimum, these lands contain existing public services including water and sewer systems, educational systems, and road systems--all of which are able to support the present population and its accompanying land uses including commercial, industrial and institutional.

TRANSITION

Purpose: The Transition class identifies lands where moderate to high density growth is to be encouraged and where any growth that is permitted by local regulation will be provided with the necessary public services.

Description: The area to be designated as Transition must be no greater than that required to accommodate the estimated county population growth at a minimum gross density of 2,000 people per square mile. For example, if the population increase for the following ten year period is projected to be 10,000 people, and it is planned that 8,000 of them will be accommodated in the Transition area, then no more than four square miles of transition area should be shown. In addition, the minimum services which will be required are the necessary water and sewer facilities, educational services, and roads. Consideration must be given to the cost of public services in the Transition area. Each local government is encouraged to estimate the approximate cost of providing public services where they do not already exist.

Lands to be classified Transition should be considered in the following order:

1) First priority is for lands which presently have a gross population density of more than 2,000 people per square mile, but do not

qualify as Developed because they lack the necessary minimum public services. These areas may not be expected to accommodate additional population, but they will require funds for services to avoid public health and safety problems.

2) Second priority is for lands that have all the necessary public services in place, but which lack the minimum gross population density of 2,000 people per square mile needed to qualify the area as Developed. These areas therefore have not utilized the capacity of the existing services.

3) Additional lands necessary to accommodate the remainder of the estimated Transition growth for the ten year planning period.

In choosing lands for the Transition class, such lands should not include:

1) Areas with severe physical limitations for development with public services.

2) Lands which meet the definition of the Conservation class.

3) Lands of special value such as the following unless no other reasonable alternative exists:

   a) Productive and unique agricultural lands;

   b) Productive forest lands;

   c) Potentially valuable mineral deposits;

   d) Potential aquifers and key parts of water supply watersheds;

   e) Scenic and tourist resources;

   f) Habitat for economically valuable wildlife species;

   g) Flood fringe lands;

   h) Open coast flood hazard areas, exclusive of ocean erosive areas;

   i) Estuarine flood hazard areas, exclusive of estuarine erosive areas.

SECONDARY TRANSITION

Purpose: The Secondary Transition class identifies lands where moderate density growth is to be encouraged. It would be desirable to provide these areas with necessary public services such as water and sewer, but the local government made no commitment to provide their services during the ten year planning period.

Description: The area designated as Secondary Transition shall be those lands where development exists and is anticipated to accommodate further development during the planning period. These lands shall be suitable for development as stipulated in the Transition class. While local government anticipates development in these areas, it makes no commitment to provide services during the planning period. If the local government is able to provide services beyond the Transition areas, then the secondary areas will be provided the additional services.

COMMUNITY

Purpose: The Community class identifies existing and new clusters of low density development not requiring major public services.

Description:

1) The Community class includes existing clusters of one or more land uses such as a rural residential subdivision or a church, school, general store, industry, etc. (Cluster is defined as a number of structures grouped together in association or in physical proximity - Webster's Dictionary).
2) This class will provide for all new rural growth when the lot size is ten acres or less. Such clusters of growth may occur in new areas, or within existing community lands. In choosing lands for Community growth, such lands should not include:

(a) Areas with severe physical limitations for development;

(b) Areas meeting the definition of the Conservation class;

(c) Lands of special value such as the following unless no other reasonable alternative exists;

(1) Productive and unique agricultural lands;

(2) Productive forest lands;

(3) Potentially valuable mineral deposits;

(4) Potential aquifers and key parts of water supply watersheds;

(5) Scenic and tourist resources;

(6) Habitat for economically valuable wildlife species;

(7) Flood fringe lands;

(8) Open coast flood hazard areas;

(9) Estuarine flood hazard areas, exclusive of estuarine erosive areas.

3) New development in the Community Class areas will be subject to subdivision regulations under the Enabling Subdivision Act (G.S. 153A-330 et. seq.)

4) In every case, the lot size must be large enough to safely accommodate onsite sewage disposal and where necessary, water supply so that no public sewer services will be required now or in the future.

5) Limited public services should be provided in the Community class such as public road access and electric power.

6) As a guide for calculating the amount of land necessary to accommodate new rural community growth, a gross population density of 640 people per square mile or one person per acre should be used. For

example, if 1,000 new people are expected to settle in low density clusters during the following ten year period, then roughly 1,000 acres of land should be allocated for new growth in Community class areas.

RURAL

Purpose: The Rural class identifies lands for long-term management for productive resource utilization, and where limited public services will be provided. Development in such areas should be compatible with resource production.

Description: The Rural class includes all lands not in the Developed, Transition, Community and Conservation classes.

CONSERVATION

Purpose: The Conservation class identifies land which should be maintained essentially in its natural state and where very limited or no public services are provided.

Description: Lands to be placed in the Conservation class are the least desirable for development because:

1) They are too fragile to withstand development without losing their natural value and/or
2) They have severe or hazardous limitations to development and/or;
3) Though they are not highly fragile or hazardous, the natural resources they represent are too valuable to endanger by development.

Such lands at a minimum should include:

1) Fragile
   (a) Wetlands

(b) Steep slopes and prominent high points

(c) Frontal dunes

(d) Beaches

(e) Surface waters including

- Lakes and ponds
- Rivers and streams
- Tidal waters below mean high water

(f) Prime wildlife habitat

(g) Unique natural areas and historic and archaeological sites

2) Hazard

(a) Floodways

(b) Ocean erosive areas

(c) Inlet lands

(d) Estuarine erosive areas

3) Other

(a) Publicly owned forest, park, and fish and game lands and other non-intensive outdoor recreation lands

(b) Privately owned sanctuaries, etc., which are dedicated to preservation

(c) Undeveloped key parts of existing water supply watershed

(d) Potential water impoundment sites

In addition to the above named types of land, a county may include other areas to be maintained in an essentially natural state which are needed to implement their stated policy objectives.

VII. POTENTIAL AREAS OF ENVIRONMENTAL CONCERN

INTRODUCTION

The North Carolina Coastal Area Management Act states that the local land use plan "shall give special attention to the protection and appropriate development of areas of environmental concern" designated by the Coastal Resources Commission. That is the purpose of this part of the plan.

Those areas of environmental concern which are listed in the "State Guidelines for Local Planning in the Coastal Area" and occurs in Beaufort County will be described, the significance will be discussed, a policy objective stated and appropriate land uses prescribed.

Once the areas of environmental concern (AEC) have been adopted by the Coastal Resources Commission, then development taking place within an AEC will require a permit. Major developments must receive their permit from the State while minor developments can be administered their permits by local government. However, the identification of AEC's in this document will not serve for purposes of permit letting. This identification is for planning purposes only.

All maps identifying areas of environmental concern are general illustration and not for determining areas requiring permits.

DESCRIPTION

An existing state park is defined as existing sites that have been acquired for use as state parks, as identified by the Secretary of Natural and Economic Resources.

The only existing state park in Beaufort County is the Goose Creek State Park property located around upper Goose Creek in Long Acre Township.

SIGNIFICANCE

Existing state parks are areas containing environmental or natural resources of more than local significance where uncontrolled or incompatible development could result in major or irreversible damage to important historic, cultural, scientific, or scenic values, or natural systems, or would be detrimental to the recreational uses of natural systems. These sites provide: (1) areas of unique or scenic value: (2) recreational uses of natural resources; (3) portrayal and interpretation of plant and animal life, geology and natural features; and (4) preservation of scientific sites and natural areas of statewide importance.

POLICY OBJECTIVE

To protect and preserve the scenic, historic, cultural, scientific and natural values of state parks.

APPROPRIATE LAND USES

Land use within the park will be determined by the state. Beaufort County should ensure that development in areas surrounding the park are compatible with the park. Emphasis should be placed on entrances to the park with careful consideration given to sign control and aesthetics.

HISTORIC PLACES

DESCRIPTION

Historic places are defined as historical, archaeological, and other places and properties owned, managed, or assisted by the State of North Carolina pursuant to G.S. 121; and properties or areas that have been designated by the Secretary of the Interior as National Historic Landmarks.

Specifically these sites are the Palmer-Marsh House, Bath.

SIGNIFICANCE

Historic resources are both non-renewable and fragile. They owe their significance to their association with American history, architecture, archaeology and culture. Properties on or approved for the National Register of Historic Places may be of national, state or local significance.

POLICY OBJECTIVE

To protect and/or preserve the integrity of districts, sites, building and objects in the above categories.

APPROPRIATE LAND USES

Adjacent development should be in keeping with the character of the historic place. Local government can ensure this by historic zoning, establishing a historic properties commission and careful planning of facilities. The county and state should encourage the appropriate municipalities to take the action necessary to protect these historic sites.

ESTUARINE AND RIVER ERODIBLE AREAS

DESCRIPTION

Estuarine and river erodible areas are defined as the area above ordinary high water where excessive erosion has a high probability of occurring. In delineating the landward extent of this area a recession line shall be determined.

The erodible areas in Beaufort County are found along the Pamlico and Pungo Rivers.

SIGNIFICANCE

The estuarine, sound and river erodible areas are natural hazard areas especially vulnerable to erosion. Development within this type of AEC is subjected to the damaging process of erosion unless special development standards and preventative measures are employed.

POLICY OBJECTIVE

To ensure that development occurring within the 25-year erodibility line is compatible with the dynamic nature of the erodible lands thus minimizing the likelihood of significant loss of property.

APPROPRIATE LAND USE

No development activity shall take place within the area vulnerable to erosion unless measures are taken to prevent the erosion which have proven effective in similar situations.

The 25-year erodibility line shall be used in determining setback from the river or sound in all ordinances and regulations such as subdivision regulations and health regulations.

SMALL SURFACE WATER SUPPLIES

DESCRIPTION

Small surface water supplies are defined as relatively small watersheds or catchment areas which contain streams classified A-I or A-II by the Environmental Management Commission. In Beaufort County this includes the Tranters Creek Watershed.

SIGNIFICANCE

Small water supply watersheds represent a source of potable water for a locality or region. Any loss or serious detriment to such an area would have serious public health implications. Such a loss would also have a significant adverse financial impact.

Uncontrolled development within the watershed would cause significant changes in the runoff patterns and would affect the quantity of water available as a raw water supply. Such development would also adversely affect water quality by introducing a wide variety of pollutants from homes, businesses, or industries, either through discharge or surface runoff into the water supply.

POLICY OBJECTIVE

To insure the continued maintenance of water quality and quantity of the surface water supply.

APPROPRIATE LAND USE

Development should be stricly controlled in this area. Extra caution should be taken in designing and placing septic tank nitrification fields to ensure that streams are not endangered. Discharge into any stream must meet water quality standards.

COASTAL MARSHLANDS

DESCRIPTION

Marshes subject to regular or irregular flooding by tides, including wind tides (whether or not the tide waters reach the marshland areas through natural or artificial watercourses), provided this shall not include hurricane or tropical storm tides. Marshlands shall be those areas upon which grow some, but not necessarily all, of the following marsh grass species: Smooth or salt water Cordgrass (Spartina alterniflora); Black Needlerush (Juncus roemerianus); Glasswort (Salicornia spp.); Salt Grass (Distichlis Spicata); Sea Lavender (Limonium spp.); Bulrush (Scirpus spp.); Saw Grass (Cladium Jamaicense); Cat-Tail (Typha spp.); Salt-Meadow Grass (Spartina Patens); and Salt Reed Grass (Spartina cynosuroides). Marshlands are located along the Pamlico River and Pungo River and their tributaries.

SIGNIFICANCE

This marshland type also contributes to the detritus supply necessary to the highly productive estuarine system essential to North Carolina's economically valuable commercial and sports fisheries.

The higher marsh types offer quality wildlife and waterfowl habitat depending on the biological and physical conditions of the marsh. The vegetative diversity in the higher marshes usually supports a greater diversity of wildlife types than the limited habitat of the low tidal marsh. This marshland type also serves as an important deterrent to shoreline erosion especially in those marshes containing heavily rooted species. The dense system of rhizomes and roots of Juncus roemerianus are highly resistant to erosion. In addition, the higher marshes are effective sediment traps.

POLICY OBJECTIVES

To give the highest priority to the preservation of low tidal marshland.

APPROPRIATE LAND USES

Appropriate land uses shall be those consistent with the policy objective. These marshes should be considered unsuitable for all development which will alter their natural functions. Inappropriate land uses include, but are not limited to the following examples: restaurants and businesses; residences, apartments, motels, hotels, and trailer parks; parking lots and offices; spoil and dump sites; wastewater lagoons; public and private roads and highways; and factories. Examples of acceptable land uses may include utility easements, fishing piers, docks, certain agricultural uses and such other uses which do not significantly alter the natural functions of the marsh. Agricultural drainage canals and maintenance of such canals shall be an appropriate land use.

ESTUARINE WATERS AND PUBLIC TRUST AREAS

DESCRIPTION

Estuarine waters are defined in G.S. 113-229 (n) (2) as, "all the water of the Atlantic Ocean within the boundary of North Carolina and all the waters of the bays, sounds, rivers, and tributaries thereto seaward of the dividing line between coastal fishing waters and inland fishing waters, as set forth in an agreement adopted by the Wildlife Resources Commission and the Department of Conservation and Development filed with the Secretary of State entitled 'Boundary Lines, North Carolina Commercial Fishing - Inland Fishing Waters, revised March 1, 1965,'" or as it may be subsequently revised by the Legislature.

Public trust areas are defined through the CAMA Planning Guidelines as "All waters of the Atlantic Ocean and the lands thereunder from the mean high water mark to the seaward limit of State jurisdiction; all natural bodies of water subject to measurable lunar tides and lands thereunder to the mean high water mark; all navigable natural bodies of water and lands thereunder to the mean or ordinary high water mark as the case may be, except privately owned lakes having no public access; all waters in artificially created bodies of water in which exists significant public fishing resources or other public resources, which are accessible to the public by navigation from bodies of water in which the public has rights of navigation; all waters in artificially created bodies of water in which the public has acquired rights by prescription, custom, usage, dedication or any other means. In determining whether the public has acquired rights in artificially created bodies of water, the following factors shall be considered: (i) the use of the body of water by the public; (ii) the length of time the public has used the area; (iii) the value of public resources in the body of water; (iv) whether the public resources in the body of water are mobile to the extent that they can move into natural bodies of water; (v) whether the creation of the artificial body of water required permission from the State; and (vi) the value of the body of water to the public for navigation from one public area to another public area.

While estuarine waters and public trust areas are treated separately in the State Guidelines, they will be considered as one for the purpose of this plan. The distinction drawn between them in the guidelines is an artificial one and has no basis other than as a political division between the commercial and sport fisheries interest. The significance of both areas is identical as are the appropriate land uses.

SIGNIFICANCE

The estuaries of any river system are among the most productive natural environments of North Carolina. They not only support valuable commercial and sports fisheries, but are also utilized for commercial navigation, recreation and aesthetic purposes. The high level of commercial and sports fisheries and the aesthetic appeal of coastal North Carolina is dependent upon the protection and sustained quality of our estuarine and river systems.

POLICY OBJECTIVE

To preserve and manage our estuarine waters and public trust areas so as to safeguard and perpetuate their biological, economic and aesthetic values.

APPROPRIATE USES

Appropriate uses shall be consistent with the above policy objective. Highest priority shall be given to the conservation of estuarine waters and protection of public trust rights. The development of navigation channels, the use of bulkheads to prevent erosion, and the building of piers or wharfs are examples of appropriate land use, provided such land uses will not be detrimental to the biological and physical estuarine function and public trust waters. Projects which would directly or indirectly block or impair existing navigation channels, increase shoreline erosion, deposit spoils below the mean high tide, cause adverse water circulation pattern, violate water quality standards, or cause degradation of shellfish waters are generally considered incompatible with the management of estuarine waters and public trust areas.

Development control over development occurring in estuarine water or public trust areas is presently exercised by state or federal government.

Local government can assist in managing these areas by controlling development adjacent to these areas. Devices such as setback lines, minimum lot sizes, septic tank ordinances, flood plain ordinances and sedimentation control can be used to control adjacent development which could impair estuarine waters or public trust areas.

VIII. SUMMARY (BIBLIOGRAPHY)

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A. MANNER OF DATA ASSEMBLY AND ANALYSIS

Due to time and monetary limitations, very little primary data was generated for this study. Data used in this plan was obtained from six different sources. These sources are:

1) Standard references such as U.S. Census, N.C. Statistical Abstract, N.C. Agricultural Statistics, Profile: N.C. Counties, etc.;

2) A county-wide survey conducted by the Planning Board;

3) Small group discussions held county-wide;

4) Interviews;

5) Previous studies; and

6) Field studies.

Analysis of this data was conducted by staff and presented to the Planning Board for their consideration.

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B. APPLICATION OF DATA TO PLAN FORMULATION

Once data was assembled and analyzed, then it was presented to the Planning Board. The Planning Board utilized the data by using it as (1) a catalyst to discussion of issues, (2) parameter to discussion, and (3) documentation that problems and issues exist.

IX. CITY-COUNTY RELATIONSHIP

RELATIONSHIP DEFINED

The Washington, Aurora, Belhaven and Beaufort County Plans' relationship can be defined as "a coordinated effort through effective land use planning to provide a balanced growth that offers the best affordable working and living environment for all Beaufort residents." This relationship has been part of a continuous process which has taken two forms: (1) complementing goals and objectives and (2) a compatible County-City Land Classification System.

Both County and City Plans address similar interest and citizen concerns. There are many examples of City and County Plan relationships in terms of complementing goals and objectives. For more specifics, the reader is asked to consult the goals and objectives sections of individual plans. In addition, examination of both Land Classification Maps and text will graphically and verbally depict compatibility and relationship of the plans land classification system.

While the municipalities of Aurora, Belhaven and Washington were permitted to prepare their own plans, the remaining municipalities were under the county. A small "mini-plan" has been prepared for each of those municipalities. These "mini-plans" give a more detailed look at each area. Goals and desired growth patterns were not determined for each area. All population figures are projections and may vary from local desires.

COASTAL AREA MANAGEMENT ACT

LAND DEVELOPMENT PLAN

BATH, NORTH CAROLINA

BEAUFORT COUNTY

The Town of Bath is located at the confluence of Bath and Back Creek on the north side of the Pamlico River in Beaufort County. The town was incorporated in 1705 and is North Carolina's oldest town.

Bath played an important role in the early history of North Carolina. It served as the state port of entry for a number of years. The General Assembly met in Bath from 1744 to 1752. Blackbeard, the notorious pirate, made his headquarters in Bath.

Today Bath is a quiet farming community. The primary means of access to the town is via N.C. 92 which links Bath with Washington, 15 miles to the west, and Belhaven, 18 miles to the east. Transportation south, across the Pamlico River, is provided by the ferry at Bayview. Secondary roads connect Bath with surrounding rural areas.

POPULATION

Bath's population is estimated at 220 for 1974. The town has been experiencing a decline in population since 1950 (Figure 1). This pattern of population loss is occurring at a more rapid rate than the county's population decline.

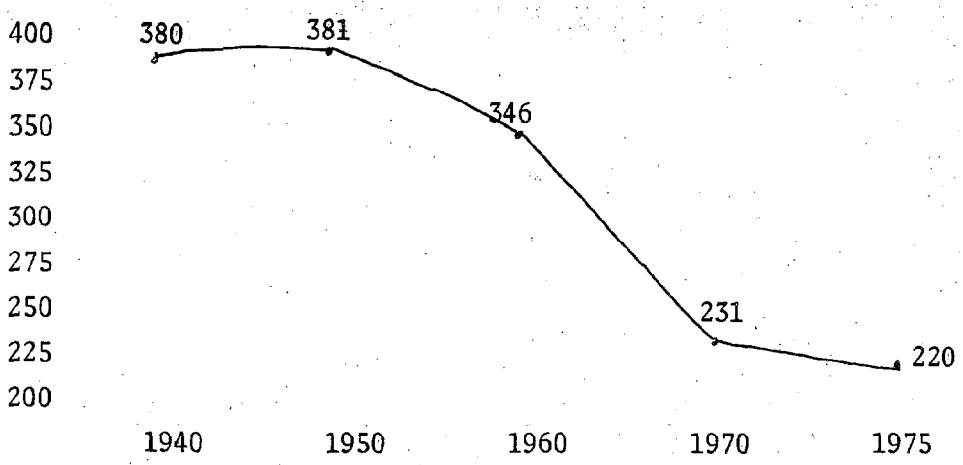
A look at Bath's population in 1970 shows that over 50 percent of the population is over 45 years of age (Table 1). This is a disproportionate number of older people as compared to county, state and national averages. The higher proportion of older people indicates that Bath will not be as likely to increase in population due to deaths exceeding births. Any population increases, or even maintaining existing population levels, will require people moving into Bath.

Table 1

Population by Age and Sex
Bath, 1970

Age	Total	Male	Female	Percent of Total Population
Under 5 yrs.	7	4	3	3.03%
5 - 14	29	14	15	12.55%
15 - 24	35	15	20	15.15%
25 - 34	15	8	7	6.49%
35 - 44	24	12	12	10.39%
45 - 54	25	13	12	10.82%
55 - 64	47	15	32	20.35%
65+	49	18	31	21.21%
TOTAL	231	99	132	100.0%

Figure 1
Population Trends
Bath, 1940-1975



The age distribution in Bath also has implications for provisions of services by local government. For instance, Bath probably would not be interested in placing the major emphasis in their recreation program on programs for pre-school children with only seven pre-school children in town.

Other characteristics for the 231 people in Bath in 1970 include: 13 percent of the population was Black, the average household size was 2.4 people, and 84.6 percent of the families in Bath had both husband and wife living with the family.

ECONOMY

Bath is largely a residential community with residents commuting to work. There are no industries in Bath or immediately adjacent to it. The nearest industry is Texasgulf, which is located across the river.

The only businesses in town are service related businesses, such as general merchandise stores, service stations, a bank, grocery stores, etc. There is presently one marina located on Bath Creek and one on Back Creek, with others planned.

The Bath Historic District attracts a number of tourists to Bath. This tourist trade supports a few gift shops and contributes to the support of other service related businesses. This tourist trade does not represent a significant contribution to Bath's local economy.

Plans are underway to establish a historic drama in Bath. If these plans are realized, there should be an increase in the number of tourists visiting Bath and thus increased economic opportunity for those businesses serving the tourist trade.

GOVERNMENT

Bath is governed by a Mayor-Council form of government. The town has no full-time employees. The town has a historic zoning regulation which is not enforced and, due to a lack of standards within the ordinance, is of questionable legality.

EXISTING LAND USE

Most of the land in Bath is vacant or in agricultural production. Of the developed land in Bath, the overwhelming majority is residential. Commercial development is spotted largely along the western side of Main Street and along N.C. 92.

The Bath Historic District is centrally located in town. Land uses within the Historic District include a visitors' center, restored houses, and residences.

There are no distinct commercial and residential areas in Bath. These activities are located adjacent to each other but, due to the low level of commercial activity, do not pose a problem of conflicting land uses.

CONSTRAINTS ON DEVELOPMENT

Several factors act as constraints on development in Bath. These may be broken into the broad categories of land potential-- the natural constraints placed on development-- and capacity of community facilities. These constraints on development do not mean that development cannot take place in the affected areas. With society's engineering expertise Bath can develop anywhere, but the constraints listed will affect the economic feasibility of developing.

Soils

Bath has good soils for development. The soils are moderately well drained with a friable subsoil. These type soils are suitable for septic tanks. As such, they provide few constraints on development.

Flood Hazard

Areas within Bath which are below a ten foot contour can be considered flood prone. This means that they are subject to flooding in the event of a 100-year frequency flood, in other words, they have a 1% chance of being flooded in any given year.

The areas in Bath which meet this criteria are those immediately adjacent to Bath and Back Creek. Most structures that are located on property adjacent to the creeks are situated so as to be out of the flood area.

Flooding presents little problem to existing development and poses few constraints on future development.

Water Supply

Bath relies on ground water for its water supply. Ground water is abundant throughout the area, and availability of water provides no constraints upon development.

The availability and quality of ground water could be affected by open pit mining activities in the area. The town should remain cognizant of this if asked to comment on permits for additional pumping of ground water by a mining concern.

Wetlands

Small patches of marsh grass spot Bath's shoreline. This marsh grass serves as a vital link in the food chain of the area's fisheries. As such,

efforts are made at the state level to preserve as much of the marsh grass as possible. This is accomplished through the N. C. Dredge and Fill Act which requires a state permit for dredging and filling in North Carolina coastal waters.

The marsh grass also serves a beneficial purpose for the property owner. The grass, due to its rizone root structure, serves as an effective means of erosion control. Property owners should encourage growth of the marsh grass to prevent erosion.

Due to the small quantities of marsh grass in Bath, it does not serve as a constraint on development.

Scenic Areas and Townscape

The proximity of large bodies of water to Bath provide an abundance of scenic vistas. Entering into Bath from the west along N.C. 92, one passes over Bath Creek. The initial view of Bath, across Bath Creek with its marina and boat docks, creates a unique impression of Bath.

Once in town, the tree-shaded streets, large, historic residences and rural atmosphere create a townscape worth preserving. The well laid-out streets make Bath reminiscent of Williamsburg and other colonial towns, but for the shabby condition of many of Bath's buildings.

If one proceeds down Main Street to Teach's Point, the panorama of Bath Creek opening up into the Pamlico River is afforded. The development which has occurred on the visible shoreline is obscured from view by a buffer zone of trees and other vegetation. As a result, the shoreline looks undeveloped.

If Bath is to capitalize on its historic past and retain its desirable features, it must preserve its scenic areas and townscape. This poses some constraints on development, largely in the area of architectural design of

buildings and provision of buffer zones between new development and the water.

Historic Areas

The Bath Historic District, created by the General Assembly in 1959, comprises a significant portion of the town. The State of North Carolina owns the property on the Historic Site and controls the land use within. Included within the site are the Palmer-Marsh House and the Bonner House.

The Town of Bath should take action to insure that development occurring adjacent to the historic site is not detrimental to it. This could be accomplished by a historic zoning district.

Presently there are no constraints to development due to historic sites except on state-owned property. If the town adopted a historic zoning district, these would be a constraint on development adjacent to the historic site. This would not preclude development; rather, it would insure compatible development.

Capacity of Community Facilities

Lack of community facilities or inadequate community facilities can serve as a constraint on development. For instance, the density of development within Bath is limited as long as the town is dependent on septic tanks. Other factors such as water systems, fire departments, etc. influence both individuals and businesses in decisions on where to locate.

At the present time Bath has no wastewater facilities and relies totally on on-site disposal methods. This, in effect, imposes a minimum lot size due to the area needed for septic tank and drain field. This places a constraint on development both from a density standpoint and from the standpoint of the town being unable to accommodate any type of development which cannot use septic tanks for wastewater disposal.

The town has recently constructed a water system. The system is supplied by two deep wells with hydroneumatic tanks. A 12,000 gallon ground tank provides limited storage for the system. The distribution system consists of 6", 4", and 2" mains and sixteen fire hydrants. The only extension outside the municipal limits is to Springdale Village, a residential area just to the east of town.

The water system is adequate to meet Bath's anticipated demands. It poses no constraints on development.

ESTIMATED FUTURE DEMAND

Population

Bath is projected to continue losing population. The town's past track record is failing to attract new residents; a lack of any basic job opportunities and a high percentage of people past the child bearing age tend to bear this out.

The population projection presented below was computed by Freeman and Associates for the Region Q Water Resources Management Plan. A projection is only a guess based on past performance. Factors such as the location of an industry in Bath or a substantial influx of tourists are not taken into account in the projection; and if these occurred, then it would affect the population change.

Table 2 Projected Population
Bath Township
Bath, and Beaufort County
1970-2000

	1970	1980	1990	2000	2010	2020
Bath	231	135	83	51	32	20
Bath Township	3,237	2,993	2,837	2,712		
Beaufort County	35,980	37,400	39,900	41,000	44,500	49,200

Source: Region Q Water Resources Management Plan; Township projections by N.C. Department of Natural and Economic Resources.

Economy

There are no indications that Bath's service related economy will change. A decline in the area's population possibly will curtail the current level of service.

Bath has no basic industries and no developed industrial sites. The probability of attracting industry is small.

The area with the most potential for growth in the Bath economy is tourism. If current plans for a historic drama are realized, there should be an increase in the number of tourists visiting historic Bath.

Bath Creek provides one of the finest sheltered harbors in Eastern North Carolina. With a growing interest in recreational boating, more people are seeking an area such as Bath to build marinas. At the present time there are a number of people interested in opening marinas in Bath. These would attract people into Bath on a short-term basis and supplement the tourist trade visiting Historic Bath. This would benefit those service related businesses which rely in part on tourist trade.

Future Land Needs

If Bath should be able to reverse its population loss, it should concentrate on developing land within the existing service areas of the town. This would allow the town to realize the greatest return on the investment already made in the water system and would minimize the cost of providing future services, such as sewer.

This policy of containing growth within the existing town boundaries and upgrading existing services within those areas has resulted in the town being classified Transitional in the county land use plan.

Community Facilities Demand

If the community maintains its present population or declines in population, the present water system and reliance upon on-site disposal of wastewater is adequate. A gain in population or location of an industry in Bath might require a wastewater treatment system.

LAND USE ISSUES

In summary, the land use issues facing Bath are:

1) Continuing population loss;
2) Lack of local economic base;
3) A high proportion of elderly population;
4) A need to protect the historic aspects of Bath;
5) A need to retain the existing townscape;
6) A need to protect the scenic properties of Bath;
7) The impact of marina development on Bath Creek and Bath itself; and
8) The impact of an outdoor drama on Bath.

IMPLEMENTATION

If Bath is to retain the desirable characteristics of the community and address the land use issues outlined above, it must,

1) Form a planning board to advise local officials on development issues;

2) Make a decision on whether the town will attempt to attract industry, increase the tourist trade, or face a continuing loss of population; and

3) Develop land use regulations to protect the historic aspects of Bath, the townscape and the aesthetic qualities of the town.

Due to its small size it is questionable whether Bath would be able to properly administer a set of land use regulations as proposed. The town should explore the possibility of the county administering these regulations for the town.

COASTAL AREA MANAGEMENT ACT

LAND DEVELOPMENT PLAN

CHOCOWINITY, NORTH CAROLINA

BEAUFORT COUNTY

The Town of Chocowinity is located on the south bank of the Pamlico, opposite Washington. It is an old community, originally strictly agricultural. The large plantations which supported the town were broken up after the Civil War. Since that time Chocowinity has been largely a crossroads trading place.

Primary access to Chocowinity is afforded via U.S. 17 which connects Chocowinity with Washington, four miles to the north, and New Bern, 31 miles to the south. U. S. 264 also connects Chocowinity with Washington and with Greenville, 16 miles to the west. N.C. 33 links Chocowinity with Aurora, 26 miles to the east. Secondary roads connect Chocowinity with the surrounding rural areas. The Norfolk-Southern railroad serves the community.

POPULATION

Chocowinity was formally incorporated during the 1950's. The 1960 Census indicated that Chocowinity's population was 580. The 1970 Census indicated a small drop in population to 566. Chocowinity's population for 1974 was estimated at 580, back up to the 1960 level.

TABLE 1
POPULATION BY AGE AND SEX
CHOCOWINITY, 1970

Age	Total	Male	Female	Percent of Total Population
Under 5 yrs.	46	21	25	8.1%
5 - 14	94	31	63	16.6%
15 - 24	97	41	56	17.2%
25 - 34	67	38	29	11.8%
35 - 44	59	28	31	10.4%
45 - 54	84	39	45	14.8%
55 - 64	63	32	31	11.1%
65+	56	20	36	10.0%
TOTAL	546	250	316	100.0%

A look at Chocowinity's population in 1970 (Table 1) shows a normal distribution by age group. There is an unusually high percentage of females in the 5 - 24 age group.

These age and sex distributions have implications for services provided by local government. For instance, if Chocowinity was providing a recreation program for young people, that recreation program would be affected by the large number of females relative to males in the 5 - 24 age group.

Other characteristics of the 566 people in Chocowinity in 1970 include: only 4.6 percent of the town's population was Black compared to 33.2 percent for the county; the average household size was 2.8 people; and, 82.9 percent of the families had both husband and wife living at home.

ECONOMY

Chocowinity originated as an agricultural community. However, like the county, Chocowinity has in recent years broadened its local economy. Hatteras Industrial Corp. located in Chocowinity in 1966, employing 5 - 9 workers. The Singer Company opened a plant in 1970 which employs 275. Edinburg Hardwood Lumber Company opened in 1971 and employs 30. In addition to these local plants, a number of people commute to jobs in Washington, Greenville and Texasgulf.

In addition to the above industries, a number of retail establishments line U. S. 17 between Chocowinity and Washington. A livestock market is located south of town.

LOCAL GOVERNMENT

Chocowinity is governed by a Mayor-Council form of government. The town has two full-time employees--a town clerk and a policeman. The town exercises no regulations which would impact land development patterns.

EXISTING LAND USE

Most of the land in Chocowinity is vacant, or in forestry or agricultural production. Of the developed land, the overwhelming majority is residential. Commercial development exists in strips along U.S. 17 and N.C. 33.

A pattern of development has emerged in Chocowinity, where commercial land use is located along the major thoroughfares. Residential development is located behind this commercial strip on connector roads.

Conflicting and undesirable land use patterns have occurred in Chocowinity due to the commercial strip development. Residential neighborhoods abut commercial and industrial land use.

CONSTRAINTS ON DEVELOPMENT

Several factors act as constraints on development in Chocowinity. These may be broken down into the broad categories of land potential -- the natural constraints placed on development -- and capacity of community facilities. These constraints on development do not mean that development cannot take place in the affected areas, only that the development may not be economically feasible.

Soils

Chocowinity has moderately well drained soils. The subsoils are firm resulting in a low percolation rate. The low percolating rates impose constraints on the use of septic tanks, thereby imposing a constraint on development.

Water Supply

The Town of Chocowinity is presently served by a water system supplied by one deep well. A 75,000 gallon elevated storage tank supplies a distribution system of 8" and 6" mains. The town is constructing an additional well and an additional 275,000 gallons of elevated storage.

The area had abundant groundwater; therefore, water supply provides no constraints upon development.

Capacity of Community Facilities

Lack of community facilities or inadequate facilities can serve as a constraint on development. For instance, the density of development in Chocowinity is limited as long as the town is dependent upon individual septic tanks as a means of wastewater disposal. Factors such as this influence both individuals and businesses in location decisions.

At the present time, Chocowinity has no wastewater, or sewage system. This, in effect, imposes a minimum lot size due to the area needed for individual septic tanks and drain fields. This places a constraint on development both from a density standpoint and from the standpoint of the town being unable to accommodate any type of development which cannot use septic tanks for wastewater disposal.

ESTIMATED FUTURE DEMAND

Population

Chocowinity is projected to continue losing population. Since Chocowinity was incorporated during the 1950's, the only Census data for the town is the 1960 and 1970 Census. The town lost a small number of people between 1960 and 1970; therefore, most population projections will indicate a decline in population.

The population projection presented below (Table 2) was computed by Freeman and Associates for the Region Q Water Resources Management Plan. A projection is only a guess based on past performance. Factors such as the location of an industry in Chocowinity are not taken into account in the projection and if such occurs, it would affect the population change.

Table 2 PROJECTED POPULATION
CHOCOWINITY, CHOCOWINITY TOWNSHIP AND BEAUFORT COUNTY

Area	1970	1980	1990	2000	2010	2020
Chocowinity	566	532	509	490	475	462
Chocowinity Township	4,661	4,854	5,050	5,300		
Beaufort County	35,980	37,400	38,900	41,000	44,500	49,200

Source: Region Q Water Resources Management Plan; Township projections by N. C. Department of Natural and Economic Resources.

The projected decline in population for Chocowinity seems unrealistic in view of:

1) An estimated increase in population between 1970 and 1974.
2) A projected increase in township population, and
3) Anticipated growth in the Washington area.

Economy

Chocowinity should benefit from expected development in the western portion of Beaufort County. With development of a wastewater treatment facility, the town will be more attractive to industries.

Future Land Needs

Chocowinity has enough vacant land within its boundaries to meet future land needs.

The town is classed Transitional in the county land use plan. Under this classification, the county would have a policy of providing facilities in this area before in Community or Rural areas.

Community Facilities Demand

Chocowinity's water system is adequate to meet anticipated demand. Due to poor soil conditions, the town will need a sewer system to accommodate future demand.

LAND USE ISSUES

In summary, the land use issues facing Chocowinity are:

1. Strip development along major thoroughfares;
2. Conflicting land uses; and
3. Need for municipal sewer system.

IMPLEMENTATION

If Chocowinity is to address the land use issues outlined above, it must:

1. Expedite development of a municipal sewer system, and
2. Establish zoning to address the issues of strip development and conflicting land uses.

COASTAL AREA MANAGEMENT ACT

LAND DEVELOPMENT PLAN

PANTEGO, NORTH CAROLINA

BEAUFORT COUNTY

The Town of Pantego is located on Pantego Creek in eastern Beaufort County. The foundation of the town was laid in 1775 when homes were established on three hundred acres north of Pantego Creek. No growth occurred until 1840 when lumbering operations were started. The town was incorporated in 1881 with a population of approximately 300. After 1900 a number of drainage districts were formed west of town. Since that period Pantego has been a farming community.

The primary means of access to Pantego is via U.S. 264 which links Pantego with Washington, 27 miles to the west, and Belhaven, 4 miles to the east. N.C. 99 connects Pantego with Plymouth in Washington County, 23 miles north. Secondary roads connect Pantego with surrounding rural areas. The town is served by a railroad line.

POPULATION

Pantego's population is estimated at 220 for 1974. The town has been experiencing a decline in population since 1940 (Figure 1). This pattern of population loss is occurring at a more rapid rate than the county's population decline.

A look at Pantego's population in 1970 shows that only 15.6 percent of its population is in the 25-44 year age bracket. This is the result of past population loss. Generally, those who leave a community are the young who are seeking greater opportunity elsewhere. If Pantego is to reverse the past pattern of population loss, opportunities will have to be provided for those completing their secondary education.

FIGURE 1

POPULATION TRENDS

Pantego, 1940 - 1975

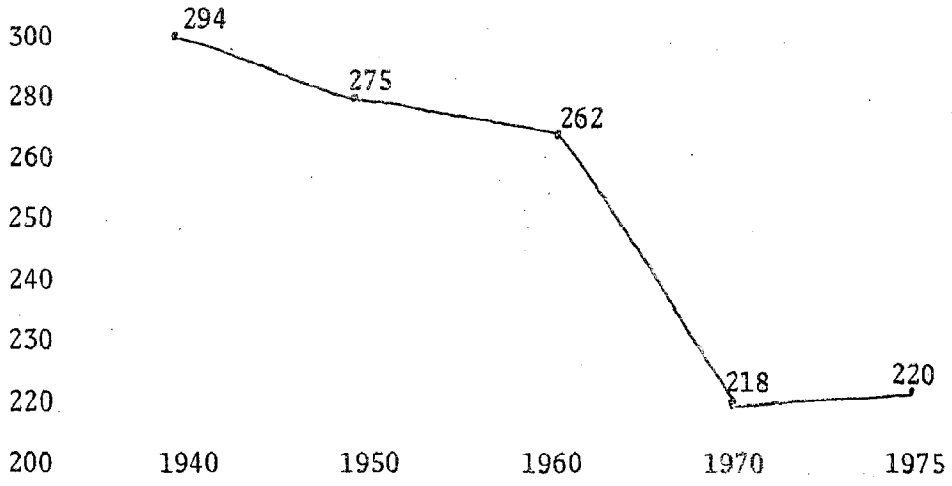


TABLE 1

POPULATION BY AGE AND SEX

PANTEGO, 1970

Age	Total	Male	Female	Percent of Total Population
Under 5 yrs.	15	7	8	6.9%
5 - 14	35	17	18	16.1%
15 - 24	28	16	12	12.8%
25 - 34	24	14	10	11.0%
35 - 44	10	5	5	4.6%
45 - 54	22	7	15	10.1%
55 - 64	40	20	20	18.3
65+	44	15	29	20.2%
TOTALS	218	101	117	100.0%

The age distribution pattern in Pantego also has indications for provision of services by local government. For instance, Pantego would want to aim a recreation program at school age children and older adults rather than only programs aimed at adults 25-44 years old.

Other characteristics of the 218 people in Pantego in 1970 include: 37.7 percent of the population was Black; the average household size was 2.9 people, and 83.9 percent of the families had both husband and wife living at home.

ECONOMY

Pantego has largely a farm-service related economy. Almost all of the businesses in town are farm-service related.

There are no industries located in Pantego. The nearest industries are in Belhaven.

GOVERNMENT

Pantego is governed by a Mayor-Council form of government. The town has no full-time employees. The town exercises no regulations which would impact land development patterns.

EXISTING LAND USE

Most of the land in Pantego is vacant or in forestry or agricultural production. Of the developed land in Pantego, the overwhelming majority is residential. Commercial development is spotted largely along U.S. 264.

The only distinct commercial area in town is at the junction of U.S. 264 and N.C. 99. Several commercial establishments are grouped together here. Elsewhere, commercial and residential areas are not distinct. There are no real conflicting land uses in Pantego, due to the low level of development.

CONSTRAINTS ON DEVELOPMENT

Several factors act as constraints on development in Pantego. These may be broken down into the broad categories of land potential - the natural constraints placed on development - and capacity of community facilities. These constraints on development do not mean that development cannot take place in the affected areas, only that the development may not be economically feasible.

Soils

Pantego has poor to very poorly-drained soils. While the soils have a good percolation rate, they are affected by seasonally high water tables, twelve to eighteen inches below the surface. Due to this, the area is not suitable for septic tanks and, therefore, provides a constraint upon development.

Flood Hazard

Large areas of Pantego lie in the flood hazard zone. This means they have been identified by the Federal Insurance Administration as subject to flooding in the event of a 100-year frequency flood. In other words, they have a one percent chance of being flooded in any given year.

The areas in Pantego which meet this criteria are those adjacent to Pantego Creek. Flooding in these areas provides a constraint on development (Map 1).

Water Supply

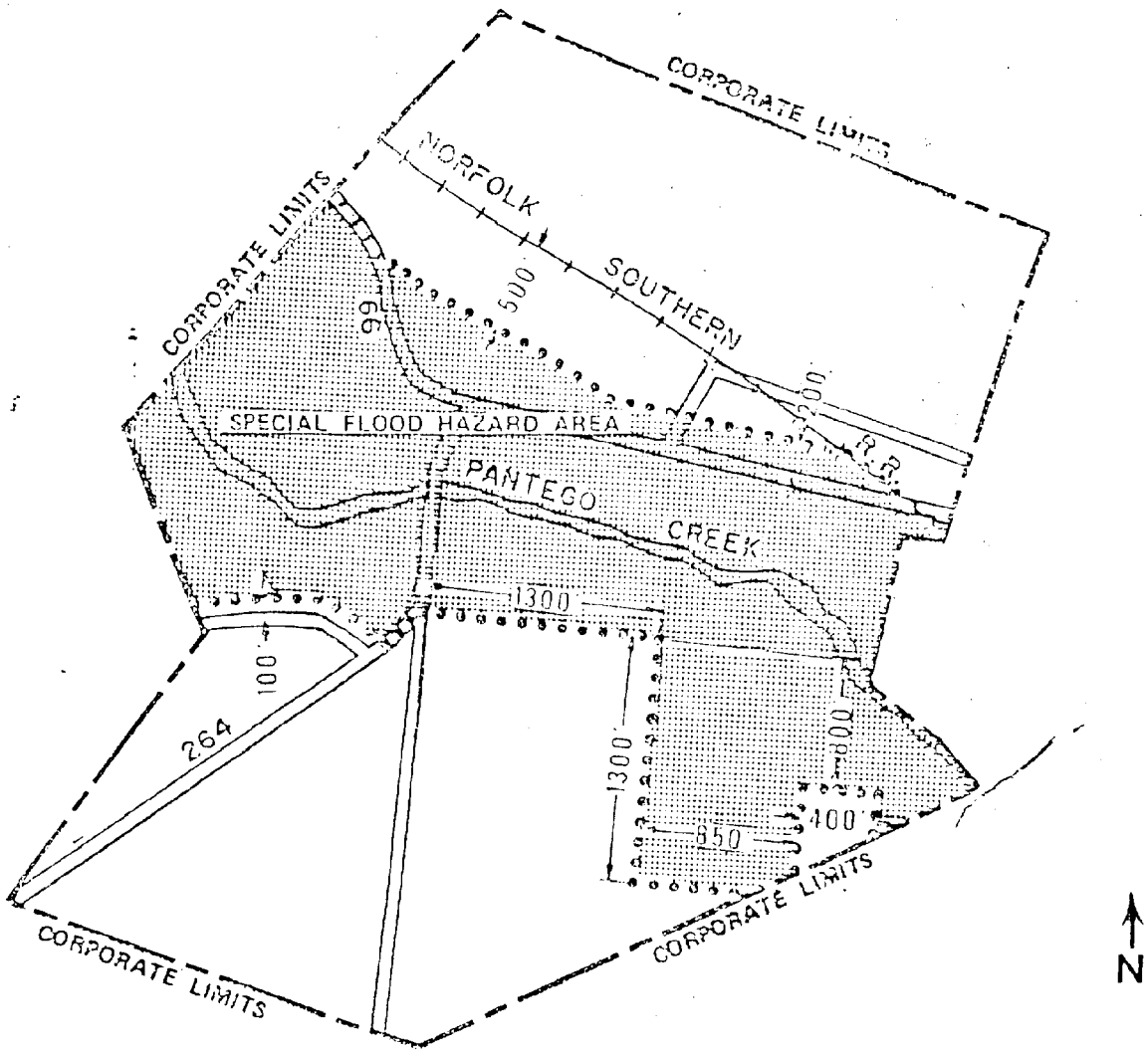
Pantego does not have a municipal water system. A study has been made to determine the feasibility of installing a small groundwater system for the town, but to date, funding has not been acquired.

The area has abundant groundwater and whether relying on individual wells or a water system, there is no constraint on development due to water supplies.

Map I

Flood Hazard Area

Pantego, N.C.



Wetlands

Marsh grass can be found along Pantego Creek. This marsh grass serves as a vital link in the food chain of the area's fisheries. As such, efforts are made at the state level to preserve as much of the marsh grass as possible. This is accomplished through the N. C. Dredge and Fill Act which requires a state permit for dredging and filling in North Carolina coastal waters.

The marsh grass also serves a beneficial purpose for the property owner. The grass, due to its rizone root structure, serves as an effective means of erosion control. Property owners should encourage the growth of the marsh grass to prevent erosion.

Where marsh grass is present along Pantego Creek, it should serve as a constraint upon development.

Capacity of Community Facilities

Lack of community facilities or inadequate community facilities can serve as a constraint on development. For instance, the density of development in Pantego is limited as long as the town is dependent on individual wells and septic tanks. These factors influence both individuals and businesses in decisions on where to locate.

At the present time, Pantego has neither a water system or a wastewater system. This, in effect, imposes a minimum lot size due to the area needed for individual well, septic tank and design field. This places a constraint on development both from a density standpoint and from the standpoint of the town being unable to accommodate any type of development which cannot use septic tanks for wastewater disposal.

ESTIMATED FUTURE DEMAND

Population

Pantego is projected to continue losing population. The town's past track record in failing to retain young adults and a lack of basic job opportunities tend to bear this out.

The population projection presented below (Table 2) was computed by Freeman and Associates for the Region Q Water Resources Management Plan. A projection is only a guess based on past performance. Factors such as the location of an industry in Pantego are not taken into account in the projection; and, if such occurs, it would affect the population change.

Table 2

PROJECTED POPULATION
PANTEGO, PANTEGO TOWNSHIP AND BEAUFORT COUNTY
1970-2020

Area	1970	1980	1990	2000	2010	2020
Pantego	218	172	139	114	94	97
Pantego Township	5,126	5,043	4,958	4,916		
Beaufort County	35,980	37,400	38,900	41,000	44,500	49,200

SOURCE: Region Q Water Resources Management Plan; Township Projection by N. C. Department of Natural and Economic Resources.

Economy

There are no indications that Pantego's land economy will change from its present-farm service economy. There are no industrial sites and no infrastructure to attract any industry.

Future Land Needs

If Pantego should be able to service its population loss, there is adequate vacant land within the corporate limits to meet future land needs.

The town is classed Transitional in the county land use plan. Under this classification, the county would have a policy of providing facilities in this area before in Community or Rural areas. Due to little prospect for growth, Pantego should have a low priority of the Transitional areas in provision of services.

Community Facilities Demand

If the community maintains its present population or declines in population, the reliance on individual well and septic tank is adequate. A gain in population or location of an industry in Pantego might require a wastewater system.

LAND USE ISSUES

In summary, the land use issues facing Pantego are:

1) Continuing population loss;
2) Lack of any local basic jobs;
3) Soil condition unsuitable for proper septic tank operations; and
4) Extensive areas subject to flooding.

IMPLEMENTATION

If Pantego is to address the land use issues outlined above, it must:

1) Explore suitable means for wastewater disposal;
2) Make a decision on whether the town will seek location of an industry in Pantego or rely on the farm service economy; and
3) Request that the county regulate development in the flood hazard area so residents will be eligible for federally backed flood insurance.

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